Bloomberg Markets

SEPTEMBER 2015

GOLDMAN SACHS: **THE NEW FORCE IN SILICON VALLEY**

THE WORLD'S STRONGEST BANKS

THE SCANDAL THAT ATE MALAYSIA

FOR SALE: ONE 511,000-ACRE RANCH, $725 MILLION (OIL WELLS INCLUDED)

MACAU DOUBLES DOWN

DESPITE A SLOWDOWN, THE WORLD'S LARGEST GAMING CENTER IS BETTING BIG ON ITS FUTURE.

Men's Split-Seconds Chronograph Ref. 5370P with intense black genuine enamel dial. Manually wound mechanical movement Caliber CHR 29-535 PS.

PATEK PHILIPPE
GENEVE

Begin your own tradition.

"The self-imposed standards at our family-owned watch company are exemplified by the complexity of our hand-finishing."

At Patek Philippe, it is our belief that while we are at the forefront of many technological developments in watchmaking, many tasks are better undertaken by hand.

Fortunately, as a family-owned company, we are able to nurture and protect the traditional and complex hand-finishing skills that make each of our watches so unique.

These skills are perfectly represented on the beautiful black enamel dial and case of the Men's Split-Seconds Chronograph Ref. 5370P, skills which are often as demanding as those used in the inner heart-beat of our renowned mechanical movements.

The flawless intense black of the hand-enamelled dial is considered as one of the most difficult colours to produce in traditional Grand Feu enamelling, a centuries old artisanal process requiring an infallible mastery of the craft to produce to perfection. The delicate setting of the hand-polished, white gold applied Breguet numerals and the printing of the white dial indications are all entrusted to highly-skilled hands. While the mirror-polished platinum case, the horizontal satin-finished hollowed flanks and the chronograph pushers are testament to the skill and many hours work of the expert polisher.

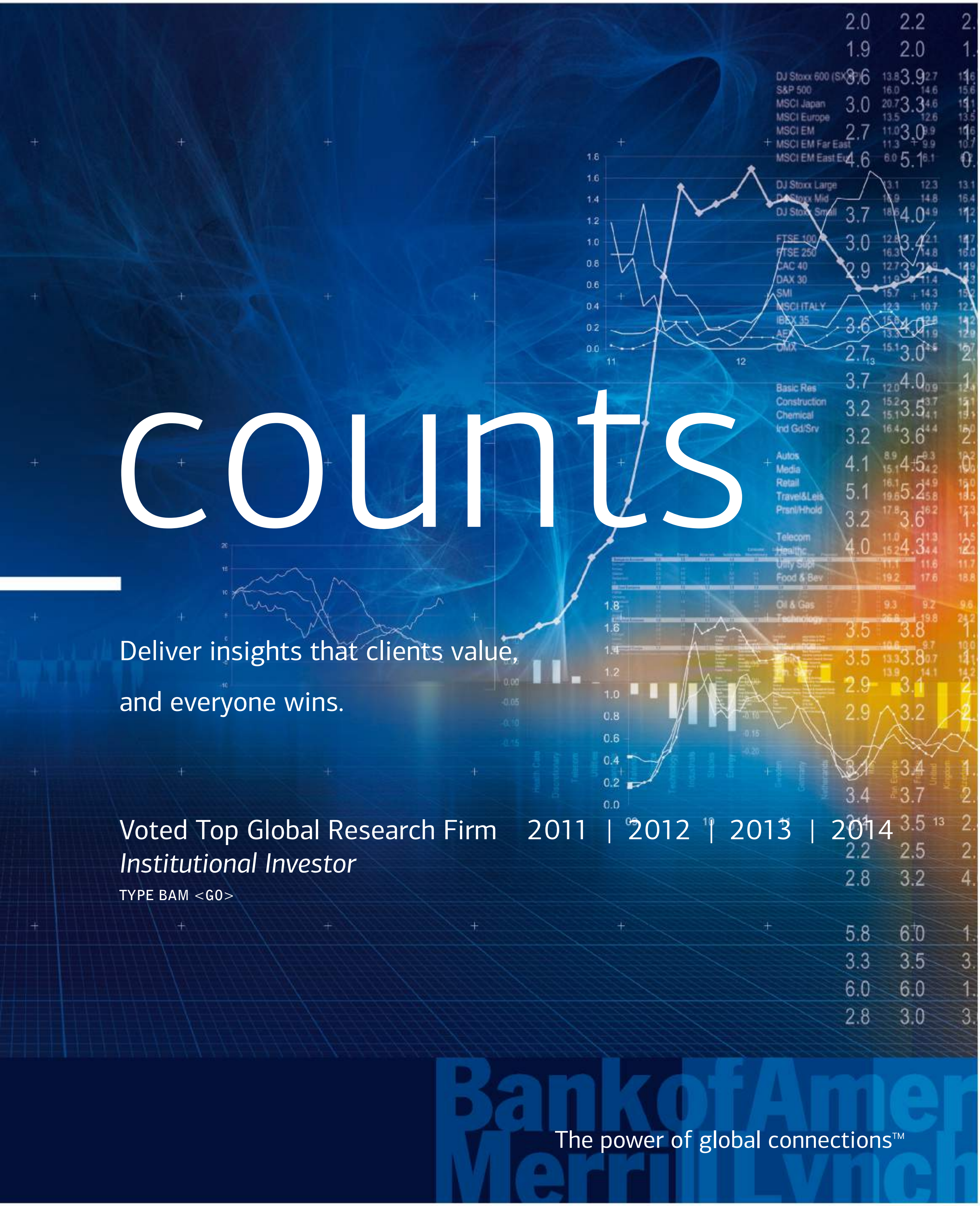
These self-imposed standards are expressed in the Patek Philippe Seal, a symbol of horological excellence beyond any existing standards in the Swiss watch industry. A symbol also of 175 years of knowledge handed down by specialists pre-eminent in their fields, whose skills contribute to the unrivalled standing of our company today.

Thierry Stern
President, Patek Philippe

Patek Philippe Seal

patek.com

TYPE PATE <GO>


counts
Deliver insights that clients value,
and everyone wins.
Voted Top Global Research Firm 2011 | 2012 | 2013 | 2014
Institutional Investor
TYPE BAM <GO>
Bank of America Merrill Lynch
The power of global connections™

September

volume 24 / number 08

‘Who approved such terrible terms for a loan to a government-owned company?’

Former Malaysian Prime Minister Mahathir Mohamad *page 52*

FEATURES

24
Goldman in Ventureland
How Goldman Sachs became a tech-investing powerhouse
BY KATRINA BROOKER

34
The World’s Strongest Banks
Hong Kong lender Hang Seng is No. 1 for the second straight year.
BY ALFRED LIU AND ELENA LOGUTENKOVA

44
Can Macau Defy the Odds?
Despite a slowing Chinese economy, casino operators are doubling down.
BY WILLIAM MELLOR AND STEPHANIE WONG

52
The Scandal That Ate Malaysia
The near collapse of a state-owned company has rocked the government and rattled investors.
BY YOOLIM LEE AND ELFFIE CHEW

60
A Man Apart
Narendra Modi has enormous ambitions, for India and himself.
BY TOM LASSETER AND KARTIKAY MEHROTRA

68
Mary Nichols’s Electric Vision
The California regulator wants all cars to be emission-free.
BY JOHN LIPPERT

44

ILLUSTRATION BY DANIEL HAIRE


One man, one engine.
One unrivaled drive.
Introducing the all-new 2016 Mercedes-AMG GT S.

September

FEATURES (CONTINUED)

76
The Subversive Central Banker
The Bank of England's Andy Haldane is a champion of unconventional economics.
BY JENNIFER RYAN

82
"As Far as the Eye Can See"
What does it take to sell a Texas property the size of a small nation?
BY BRYAN GRULEY

90
Deal Man in the Stans
Aidan Karibzhanov is chasing riches in Central Asia.
BY NARIMAN GIZITDINOV

COMMENTARY

8 **EDITOR'S VIEW**
Goldman and the Unicorns

10 **LETTERS**

20 **BLOOMBERG VIEW**
Man Up

AGENDA

12 Marginal Behavior in China's Stock Market

14 A How-to Guide for Opening a Wealth Management Firm

16 Greece Is a Bailout Junkie

18 A New Baron in Bordeaux

STRATEGIES

98 **PROFILE**
Profiting From Investor "Mistakes"
BY JON ASMUNDSSON

100 **CHEAT SHEET**
Commodities

101 **NEWS**
Keeping Tabs on Deal Chatter
BY MARK BOARDMAN

102 **FIXED INCOME**
Testing and Optimizing a Mean-Reversion Strategy
BY PAUL CIANA, CMT

104 **WHAT'S NEW**

GET OUR iPAD APP.

Download at **MKTS <Go>** or **bit.ly/bbmarkets**.

ON THE COVER

PHOTO ILLUSTRATION BY **SEAN McCABE**

COVER PHOTOS, CLOCKWISE FROM TOP: BILLY H.C. KWOK/BLOOMBERG; RAUL ARIANO/NURPHOTO/CORBIS (2); SEAN PAVONE/ALAMY; RAUL ARIANO/NURPHOTO/CORBIS; TUIMAGES.COM/ALAMY; ASIA IMAGES GROUP PTE/ALAMY; WANG QIAN/IMAGINECHINA/CORBIS; THIS PAGE: JESSE CHEHAK; ILLUSTRATIONS, FROM LEFT: MARCOS CHIN; CDR

Editor's View

Goldman and the Unicorns

GOLDMAN SACHS HAS been called many things, but "hip" isn't usually one of them. That may change. Katrina Brooker shows how the quintessential Wall Street investment bank has quietly become a force in Silicon Valley (**"GOLDMAN IN VENTURELAND,"** page 24). Goldman, it turns out, has financed more than 100 private tech companies since 2009, including Uber, Pinterest, Dropbox, and 12 other so-called unicorns—startups that are valued at more than $1 billion.

Goldman, a new force in Silicon Valley, has financed more than 100 tech firms.

Whether or not Goldman is hip, the firm is widely considered to be smart, especially when it comes to making money. And these days, tech is where the money is, not to mention the talent, energy, and ideas. Joining Goldman in the rush west are other East Coast stalwarts, including T. Rowe Price, Fidelity, and Tiger Global Management. "Being on the cutting edge of technology has become more important than ever," says analyst Jeffery Harte, who follows financial institutions at Sandler O'Neill.

GAMBLING EXECUTIVES TEND to have one thing in common: They don't like to gamble. Francis Lui, the billionaire deputy chairman of Galaxy Entertainment, says he prefers walking his dog to mixing it up at the baccarat table with the high rollers who frequent his Macau casinos. Yet William Mellor and Stephanie Wong report that Lui and his fellow magnates are placing a huge expansionary bet on Macau, just as China's slowing economy and its crackdown on corruption have sent the territory into a tailspin (**"CAN MACAU DEFY THE ODDS?"** page 44). Lui predicts China's burgeoning middle class will eventually rekindle demand for Galaxy's games and glitter—and that's one chance he's willing to take.

Ron Henkoff

EXECUTIVE EDITOR

To write a letter to the editor, e-mail **bloombergmag@bloomberg.net** or type **MAG <Go>** on the Bloomberg Professional service.
For subscription questions, e-mail **bloombergmarkets@cdsfulfillment.com**.
Visit us at **bloombergmarkets.com** and follow us on Twitter at **@markets**.

Bloomberg Markets

EXECUTIVE EDITOR
Ronald Henkoff

MANAGING EDITOR
Dan Ferrara

CREATIVE DIRECTOR
Siung Tjia

SENIOR EDITORS
Robert S. Dieterich
William Hawley
Stryker McGuire (London)
Gail Connor Roche
Joel Weber

STRATEGIES EDITOR
Jon Asmundsson

SENIOR WRITERS
Stephanie Baker (London)
Katrina Brooker
Anthony Effinger (Portland)
David Evans (Los Angeles)
Jeremy Kahn (London)
Yoolim Lee (Singapore)
John Lippert (Chicago)
William Mellor (Sydney)
Edward Robinson (London)
Michael Smith (Rio de Janeiro)

DESIGN AND PHOTOGRAPHY
Lou Vega (Senior Art Director)
John Genzo (Managing Art Director)
Lily Chow (Graphics Director)
Lauren Winfield
(Deputy Photo Editor, London)
Manuela Oprea (Photo Editor)

COPY EDITORS
Nicole Dekle Collins
Joyce L. Kehl

EDITORIAL ADMINISTRATOR
Missy Levy

GLOBAL REVENUE OFFICER
Paul Caine

GLOBAL MARKETING DIRECTOR
Zazie Lucke

PUBLISHER
Michael Dukmejian 212-617-2653

ADVERTISING DIRECTOR, AMERICAS
Chris Kurtz 212-617-3087

ADVERTISING DIRECTOR, APAC
Patrick Brownlow 65-6231-3486

ADVERTISING DIRECTOR, EMEA
Matt Teeman 44-20-3525-9986

FINANCIAL DIRECTOR
John Maresca

U.S. SALES
Ted Dolan 212-617-2182
Adrienne Bills 212-617-6073

MIDWEST SALES
Paul Kissane 312-443-5924

WEST COAST SALES
Rich Fimbres 323-782-4249

TEXAS SALES
Jackie Olson 972-529-6706

LATIN AMERICA SALES
Patricia Medici 305-579-4334

CONSUMER MARKETING DIRECTOR
Johnna Ayres 212-617-1833

CONSUMER MARKETING MANAGER
Daniel Murphy 212-617-7934

OPERATIONS/PRODUCTION
Melvin Arriaza
James Delahanty
Debra Foley
Steven J. McCarthy
Bernie Schraml

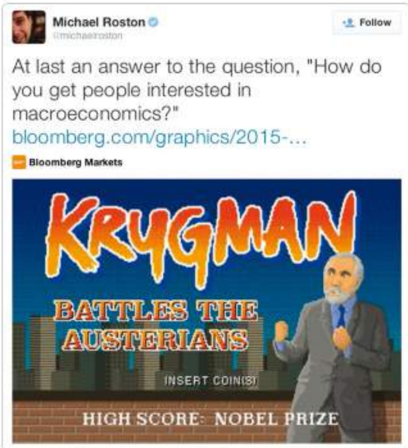
A BPA INTERNATIONAL BUSINESS PUBLICATION

Advertising inquiries:
212-617-3087

Letters

TWEETS

"Krugman Battles the Austerians" (July/August 2015) was shared by Michael Roston, senior staff editor for science at the *New York Times*:



And from Robert Litan, a nonresident senior fellow at the Brookings Institution, a note on "And Then There Were Two" (July/August 2015):

CORRECTION

Regarding the timeline featured in "God's New Bankers" (June 2015), we should have stated that the 1945 smuggling of looted gold to the Vatican Bank by Croatia's pro-Nazi regime hasn't been definitively proven.

UPDATES

Stopping Tainted Tungsten

In May, 20 months after *Bloomberg Markets* reported that tungsten illegally mined by Colombia's FARC guerrilla group was used by some of the world's best-known companies, government troops seized the Tiger Hill mine we wrote about. The site generated about $1.7 million a month for FARC, formally known as the Revolutionary Armed Forces of Colombia. Government soldiers also took over two other mines and arrested 59 people, including a dozen FARC members. Colombia's government began planning the assaults after we documented in September 2013 that FARC tungsten was making its way to the supply lines of BMWs, Ferraris, Porsches, Volkswagens, computers, and BIC pens. **MICHAEL SMITH**

Kelcy Warren's $53 Billion Pipe Dream

Kelcy Warren is thinking even bigger. After we reported in our June issue that Warren had built his Energy Transfer Partners into one of North America's largest oil and gas pipeline companies ("How to Have Fun in an Oil Bust"), he announced on June 22 that he wanted to acquire a main rival, Williams. His unsolicited offer: $53 billion. If Warren succeeds, the deal would go a long way toward helping him achieve his goal of more than doubling his pipeline network in 10 years. **BRYAN GRULEY**

Varoufakis Finds the Exit

By the time Yanis Varoufakis fell on his sword, it was too late. The polarizing and outspoken Greek finance minister, whose intense rivalry with German Finance Minister Wolfgang Schäuble we reported on in our July/August issue, quit on July 6, saying in a blog post, "I shall wear the creditors' loathing with pride." A week later, his former colleague, Prime Minister Alexis Tsipras, capitulated to the demands of Schäuble and his boss, Chancellor Angela Merkel—the latest, and not yet conclusive, act in a Greek drama that's gone on for five years. **EDWARD ROBINSON**

INFORMATION FOR READERS

LETTERS TO THE EDITOR Send an e-mail to bloombergmag@bloomberg.net or type MAG <Go> on the Bloomberg Professional service. We reserve the right to edit all letters for space and clarity.

REPRINTS Contact The YGS Group at 717-505-9701 x104 or BloombergReprints@theYGSgroup.com.

SUBSCRIPTIONS For address changes and requests for copies, call 212-617-7880, send an e-mail to bloombergmarkets@cdsfulfillment.com, or fax 917-369-8400. To subscribe, call 1-888-BLOOMBERG. For assistance in running functions on the Bloomberg Professional service, press <Help> twice.


NEW
OPPORTUNITY
FOR GLOBAL
INVESTORS
KINGDOM OF SAUDI ARABIA
TASI 9668.10 BANK AND FINANCIAL SERVICES 21563.35 CEMENT 7,029.68 RETAIL 17,827.57 ENERGY & UTILITIES 6,890.34 INSURANCE 1,683.48 TRANSPORT 10,495.45

Marginal Behavior

China's stock market, inflated by inexperienced investors playing with excessive leverage, will likely frustrate government efforts to support it.

WHAT'S GONE WRONG in the Chinese stock market? There are plenty of causes to consider, but a good one-word summary would be: margin.

As the Shanghai Composite Index soared more than 150 percent in the 12 months leading up to its peak in mid-June, margin accounts ballooned faster. Total margin lending to participants in mainland China's two big markets, Shanghai and Shenzhen, jumped more than 450 percent in that period, peaking at 2.27 trillion yuan ($365 billion) on June 18.

"A market led by leverage isn't going to last very long" says Andy Xie, an independent economist in Shanghai who previously worked for the World Bank and Morgan Stanley. He says Chinese stocks were being driven higher by young and inexperienced speculators—people who were not in the market when Shanghai stocks fell by two-thirds in 2007 and 2008.

China now has some 90 million individual investors, more people than there are members of the Communist Party. About 80 percent of trades on domestic stock exchanges are by individuals. When these investors use margin—pledging the value of stocks they already own to borrow money to buy more—the market becomes vulnerable. Selling begets selling when lower stock prices prompt margin lenders to demand additional collateral.

Chinese investors opened a record 4.44 million stock brokerage accounts in just one week at the end of May, right as the fear of missing out began to change into plain old fear. On May 28, a tightening of margin

ILLUSTRATION BY MARCOS CHIN

requirements by large Chinese brokerages helped trigger a one-day selloff that may have been the first clear sign of the coming rout. The Shanghai Composite slid 6.5 percent that day, rebounded for two weeks to a peak on June 12, and then began its steep slide in earnest.

Shanghai stocks lost as much as 32 percent in less than a month. Even so, they still, as of July 14, had a 12-month gain of 90 percent—kind of. Some 700 companies' shares, representing almost a quarter of all Shanghai and Shenzhen listings, were halted as of mid-July and had been for days, making it impossible to know true index levels. It also may be hard to know the true extent of margin lending. Bocom International, a Hong Kong brokerage, estimates that additional unregulated borrowings for stock purchases may be almost equal to China's official margin account tally.

Allowing companies to simply not trade was one measure the government embraced as it tried to halt the plunge in early July. The government also banned large shareholders from selling and ordered state-run institutions to buy. In addition, the People's Bank of China on July 8 said it would provide ample liquidity to China Securities Finance Corp. The securities agency was created in 2011 to provide margin financing to securities companies, as the government began to encourage expanded stock market participation. The run-up in stocks had been helped along by the government, with state-run media advocating equity investments as recently as the end of 2014.

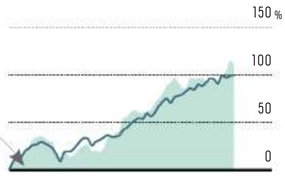
Tai Hui, Hong Kong–based chief Asia market strategist at JPMorgan Asset Management, is skeptical that government intervention can succeed. "It's coming to a point where you're covering one bad policy with another," he says.

"The more resources authorities commit to propping up the stock market," says Andrew Wood, an analyst at BMI Research, "the more they ratchet up the potential fallout risks should the market continue to collapse." The result could be a "crisis of confidence," he says, about the government's ability to manage the stock market or the real economy.

KYOUNGWHA KIM AND KANA NISHIZAWA

Excess Defined

Margin lending and index gains often move in tandem; this chart shows **U.S. margin debt** and the S&P 500 Index over five years.



But in China in the past year, **balances in margin accounts** climbed at triple the pace of stocks' gains, even as the Shanghai Composite Index boomed. Leverage was getting extreme, and the selloff through mid-July failed to shake the excess borrowing out of the market.

Source: Bloomberg

RECENTLY DEPARTED CEOs WHO LEFT EUROPEAN BANKS IN 2015*

JEAN-PAUL CHIFFLET *Crédit Agricole*

PETER SANDS *Standard Chartered*

BRADY DOUGAN *Credit Suisse*

ANSHU JAIN *Deutsche Bank*

ANTONY JENKINS *Barclays*

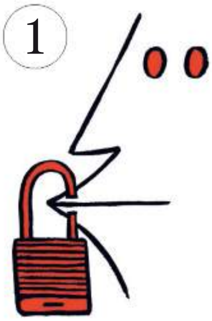

*As of July 16.

Investment Upstarts

A how-to guide for brokers looking to open their own wealth management firms.

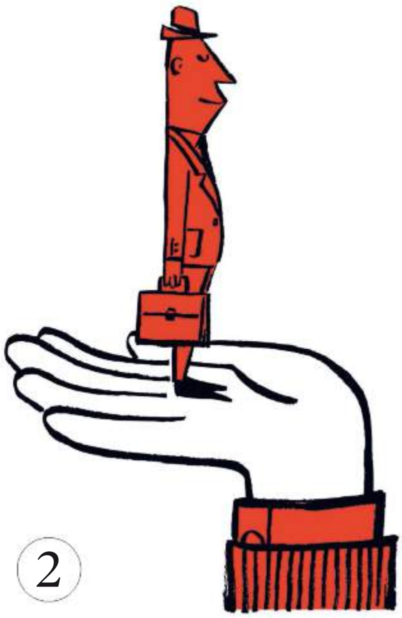
SINCE 2007, only one segment of the wealth management industry has boosted its market share every year: independent advisory firms. They've more than doubled their assets in that time, overseeing about $2.7 trillion as of 2014. And there's room for growth. According to an estimate by Boston Consulting Group, a total of $46 trillion in private wealth is up for grabs in the U.S. We asked several independent investment advisers, many of them former brokers, about setting out on their own. Here's their advice. **MARGARET COLLINS**

1



Don't get sued.

When Hugh Anderson was plotting his exit from Merrill Lynch in 2012, he didn't even tell his own children. He was trying to meticulously follow broker protocol rules, which govern how to leave a firm without getting sued. If you're subject to them, don't tell any clients about your new business until after you've resigned. (And when you do quit, there's a limited amount of customer information you can take, such as phone numbers and e-mail addresses.) Also, you can't use company time to plan your departure, says Anderson, who's now managing director of HighTower Las Vegas. So keep your weekends, early mornings, and evenings free.



2

Enlist professional help.

A cottage industry has emerged to help advisers pry themselves free. Firms such as Dynasty Financial Partners, Focus Financial Partners, HighTower Advisors (which includes firms such as Anderson's), and Tru Independence can handle details that many brokers are clueless about: getting a municipal license to run a business, setting up compliance procedures, filing necessary regulatory documents, and plugging into custodians that hold assets. They can also help keep your move covert by, say, finding office space and negotiating your lease. Just do your homework before picking one, says David J. La Placa, who, with Dynasty's assistance, left Deutsche Bank with his team in June to start San Francisco–based Intellectus Partners. The firms vary in how they charge for services (via a percentage of assets or a consulting fee) and may even want an ownership stake in your new firm. Some of their business models may fit better or worse, depending on whether you plan to charge only annual fees on assets or charge commissions on certain investments.

3

Embrace technology.

Several shops have developed software in recent years geared toward independent advisers. Some of it matches or exceeds what brokers have at large banking and trading firms, says Colin Williams, who, with help from Tru Independence, left Morgan Stanley with four teammates to start Encompass Wealth Advisors in Portland, Oregon, last year. He and his partners picked a trading and reporting tool made by Chicago-based Envestnet because it lets them customize model portfolios for clients, see hypothetical changes to a portfolio, and easily rebalance investments. La Placa went with Mountain View, California-based Addepar, whose software allows you to see exposure to a given asset class across an entire portfolio, updates the value of clients' investments in real time, and generates comprehensive reports at the push of a button.

FROM LEFT: ERIC PIERMONT/AFP/GETTYIMAGES; SIMON DAWSON/BLOOMBERG; MATTHEW LLOYD/BLOOMBERG; MARTIN LEISSL/BLOOMBERG; SIMON DAWSON/BLOOMBERG

ILLUSTRATIONS BY CDR

"Germany is the single best example of a country that, throughout its history, has never repaid its external debt." Economist Thomas Piketty

Source: Die Zeit *(translation by* The Wire*)*

4 Hone the sales pitch.

If you follow broker protocol rules, your exit should come as a shock to clients. Most teams head straight to their new office after resigning and begin calling clients to persuade them to move their money to the new firm. Clients typically want to know what you'll be able to deliver. "We talked about the future and taking our service to the next level of sophistication," Anderson says. Those who agree to follow you must sign documents to shift accounts. Have overnight mail packages with express return envelopes and transfer paperwork ready to go on day one of your new firm, says Matthew Presjak of Encompass. And remember that once you quit, your old company will probably divvy your clients quickly to other brokers, who will solicit them too, he says.

5 Don't forget the details.

While your firm's name and logo are important, the website is crucial. "It's everybody's gut check on you," says Michelle Smith, chief executive officer of Source Financial Advisors. You'll also want to think about how to divide your equity among your partners. If you're defecting as a team, create an operating agreement among partners before you start. It should outline each owner's equity stake and contingencies for when someone retires or wants to sell shares, or if there's an ethical breach, says Williams of Encompass. Some of the terms you hope you'll never have to enforce, but it's prudent to have them in place, he says.

GREECE IS A BAILOUT JUNKIE

A hedge fund math whiz and Athens native who lives in Dublin sees Ireland as a good example for avoiding financial dependency.

KONSTANTINOS DRAKAKIS, born in Greece but living in Ireland, is a mathematician who writes algorithms to predict prices for Probability Dynamics, a hedge fund in Dublin. While his company doesn't invest in Ireland or Greece, he has endeavored to make himself an expert on the Greek economic fiasco. Drakakis heads an expat group, the Hellenic Community of Ireland, and has found the topic comes up often. "Everyone kept asking me about it, so I had to educate myself."

The explanation Drakakis has settled on is more generous to his adopted country than his native land and nearer the views of Germany's Angela Merkel than those of Alexis Tsipras in Greece. Even before the latest bailout, Drakakis, who is 40, had come to believe that keeping the aid flowing would make little difference.

"It's like giving money to a drug addict," he says. "He's going to spend it and ask for money again later."

Having left Athens 17 years ago to study at Princeton University, Drakakis says he sympathizes with Greece's creditors: "They don't trust Greece because successive governments didn't do what they promised."

Drakakis has had a front-row seat as the fortunes of his old and new homes diverged after both accepted financial rescues in 2010. Greece has stumbled from crisis to crisis; Ireland is now the fastest-growing economy in the euro region. By almost any measure, from sovereign debt yields to unemployment to gross domestic product, Ireland is ahead. The country exited its bailout in 2013—and faces no threat of being kicked out of the euro.

Drakakis attributes Ireland's revival in part to a 12.5 percent corporate tax rate that attracts companies such as Google. And while Ireland's government debt is shrinking, Greece's has ballooned to 180 percent of annual GDP. "Greece has a lot to learn from Ireland," he says, but isn't heeding. "When Greece looks to other countries, it's not looking at Ireland. It's looking at more socialist countries."

DARA DOYLE

FROM TOP: ADAM BERRY/GETTY IMAGES; DARA DOYLE/BLOOMBERG

Vino Visuals

The works of dozens of prestigious artists, including Chagall, Picasso, and **Keith Haring**, at right, have appeared on Mouton Rothschild's labels since 1945.

Philippe Sereys de Rothschild and Carole Bouquet

A New Baron in Bordeaux

The boss at Mouton Rothschild sounds off on the challenges of staying haute.

PHILIPPE SEREYS DE ROTHSCHILD likes to call himself a financier in a family of artists. In October, after the death of his mother, Baroness Philippine de Rothschild, he became chairman of the supervisory board of Baron Philippe de Rothschild SA, which oversees first-growth Château Mouton Rothschild and other brands in France (including best-selling Mouton Cadet), Chile (Almaviva), and the U.S. (Opus One). His brother, Julien de Beaumarchais, and sister, Camille Sereys de Rothschild, are co-owners. When I interviewed him, Rothschild, 52, had just returned to Bordeaux from the Cannes Film Festival, where the Mouton Cadet Wine Bar is always a popular hangout and where he hit the red carpet with his frequent companion, actor Carole Bouquet. Rothschild brings more than family connections to his new role: Armed with an MBA from Harvard, he had a career in business and finance, including creating a private-equity technology fund. **ELIN McCOY**

Your grandfather got Mouton elevated to first-growth status [in 1973], and your mother was also a powerful personality. How did you work with her?
It was a subtle balance when I started on the board in 2006. She consulted me, but she was 100 percent the president. You can't divide power!

How is the wine business different from other businesses?
The key word is *long-term*. It's a mistake to think we're in the luxury product business; we're in the agriculture business. We can't rush things. When we rip out a 1-acre vineyard to replant, it's a minimum of five years before we can use the grapes. That's why we are going to stay a family business.

You've made a lot of investments recently. Can this pace continue?
We struggled the last 10 to 15 years to be the top; maybe it's more difficult to stay there. We've spent millions of euros on building and renovating at Mouton and Ch. Clerc Milon. On our other properties, like Almaviva, there's still a lot to do.

And Mouton Cadet?
It's Bordeaux's biggest brand—we sell 12 to 13 million bottles a year—but we're working on making it more premium. It has a relationship with the Cannes Film Festival and now the Ryder Cup.

What are your plans for Mouton's famous art labels?
My brother, Julien, is the artistic one, so he'll be more involved. And we have constraints. The artists convey the image of Mouton, so we only deal with those at the very top. But they can be a nightmare: They promise something in three months, but then you find out nothing has happened!

Tasting Notes

2014 Le Petit Mouton ($110, futures) Intense and lively, with notes of dark fruit and cocoa, Mouton Rothschild's second wine will be ready to drink sooner than the *grand vin*.

2014 Château Clerc Milon ($45, futures) Scented, smooth, plush, and almost lip smacking, it's packed with fruit.

2010 Opus One ($285) This surprisingly elegant cabernet blend, from a joint venture with Robert Mondavi, offers deep fruit and minerality.

2014 Ch. Mouton Rothschild ($315, futures) Big and powerful, it's also silky, vibrant, and complex. The futures price is a bargain relative to other recent vintages. **E.Mc.**

BERTRAND RINDOFF PETROFF/GETTY IMAGES; COURTESY OF CHÂTEAU MOUTON ROTHSCHILD (2)

BloombergView

Man Up

In Malaysia, a financial scandal linked to the prime minister underscores the need for greater transparency in a country with very little.

If **Najib Razak** wants to clear his name, he should make way for a truly independent investigation.

MOHD RASFAN/AFP/GETTY IMAGES

MALAYSIAN PRIME MINISTER Najib Razak may very well be, as he insists, innocent of allegations that he's responsible for unscrupulous dealings by state-owned 1Malaysia Development Bhd. But his handling of the scandal has only underscored the country's many weaknesses.

The accusations against Najib revolve around the finances of 1MDB—a debt-ridden state investment company whose advisory board he chairs. As Yoolim Lee and Elffie Chew report in this issue ("The Scandal That Ate Malaysia," page 52), the near collapse of 1MDB has shaken Najib's government. In early July, the *Wall Street Journal* reported that hundreds of millions of dollars may have moved through agencies linked to 1MDB and landed in accounts controlled by the prime minister. Najib has alleged a political conspiracy to undermine him and has vowed not to resign.

Whatever the facts of the case, Najib inhabits a system that has long suffered from allegations of cronyism. His party has dominated the government for decades, and he may be able to cling to his position regardless of what facts are revealed. The opposition coalition fractured on the recent conviction of its leader, Anwar Ibrahim, on spurious charges. Retrograde sedition laws and a docile domestic media stifle dissent. And Najib has postponed party elections until 2018, making a party coup even harder.

Four different official investigations into 1MDB had been announced before the *Journal*'s report—by the government's auditor general, a parliamentary committee, the police, and the central bank. But questions linger over their independence. A "special task force," led by the attorney general, appears to be investigating with more vigor, yet its scope and authority are vague. If the prime minister wants to clear his name, he should make way for a truly independent investigation of the allegations against him—perhaps structured as a royal commission with wide-ranging powers.

More important for avoiding such scandals in the future is to eliminate the patronage politics that encourage corruption, and this will require far broader reform. Malaysia needs a thriving opposition and freer media, as well as a far more powerful and independent anti-corruption agency. Stricter campaign funding rules would reduce the risk of vote buying. Officials' personal finances should be made more transparent.

Najib has earned praise for his economic stewardship; Malaysia recently avoided a downgrade by Fitch Ratings. The country's reputation, though, no less than Najib's, is suffering a grievous blow. Neither will be easily healed.

BY THE EDITORS OF BLOOMBERG VIEW

To read more editorials, type **VIEW <Go>** on the Bloomberg Professional service or go to **BLOOMBERGVIEW.COM**.


HOW
DO YOU
look ahead
WHEN YOU'VE
BARELY HAD
A CHANCE
TO LOOK UP?
When you've poured your energy into building a successful business, it's often difficult to imagine what's next. Whether you plan to expand your business or sell it, our team of experienced wealth planners and advisors can assist you with your next move. We can give you access to credit or help manage the proceeds from a sale. Together, we'll create a comprehensive plan so you can move forward with confidence.
TYPE USTT <GO> ustrust.com/business Life's better when we're connected®
U.S. TRUST
Bank of America Private Wealth Management

GOLDMAN IN VENTURELAND

ILLUSTRATION BY EBOY

BY KATRINA BROOKER

THE INSIDE STORY OF HOW—AND WHY—GOLDMAN SACHS

BECAME A TECH-INVESTING POWERHOUSE

"THEY WEREN'T COMING JUST TO GET WASTED,"

says Mel Cavaricci—aka DJ Mel—recalling the crowd milling in front of his sound table at a party in March.

It was at the height of the annual South by Southwest (SXSW) conference, held in Austin, Texas. The event, which started as a music festival, more recently has become famous for propelling the likes of Twitter, Foursquare, Meerkat, and other fast-growing startups. Tech and media companies throw liquor-soaked bashes to celebrate themselves, promote products, and woo hard-to-hire software developers. Music service Spotify hosted a week-long concert series. MRY, a digital marketing firm, hosted a party featuring rapper Busta Rhymes and dancers with big Day-Glo sticks.

This year, Cavaricci had been hired to spin for a company he'd never seen around SXSW before: Goldman Sachs. The party was different from his usual gigs; it was hard for the deejay—a veteran of many SXSW raves—to figure out what to play. "From the looks of the crowd, they didn't want to hear EDM," he says. So instead of electronic dance music, he picked oldies. One in particular, Edwin Starr's 1970s classic *Easin' In*, seemed to fit: *"There's a man coming into town ... Like a cat that's stalking its prey, he don't wanna let it get away ...."*

Goldman Sachs, arguably the most powerful bank in the world, quietly, without fanfare, is making a play to become one of the most influential investors in technology startups. According to research firm CB Insights, the Wall Street bank has participated in 132 fund-raising rounds in private technology companies since 2009, with 77 of those deals made in the past 2½ years alone.

Its activities rival those of the top venture capital firms in Silicon Valley. Goldman has backed Uber Technologies, Pinterest, Dropbox, and 12 other so-called unicorns, that once-rare breed of startup valued at $1 billion or more. Goldman ranks in the top 10 of CB Insights' unicorn backers—ahead of such Silicon Valley heavyweights as Peter Thiel's Founders Fund and New Enterprise Associates. And unlike many of Silicon Valley's top financiers, Goldman's reach is truly global: It's in startups ranging from an online pet store in China to a food delivery site headquartered in Germany, to a Korean app developer.

What's driving Goldman into venture territory? This is where the action (and the big money) is. At last count, there were 119 startups valued at more than $1 billion—almost all created within the past few years. Consider Uber, whose private valuation in just six years has soared from zero to $50 billion based on reports that it's trying to raise more money.

That kind of skyrocketing growth is hard for Wall Street veterans to resist. Blackstone co-founder Steve Schwarzman, 68, recently confessed that if he were 30 years younger, he'd move to California. "There's so much disruption and so much amazing value creation," he said at a conference in late May. Ruth Porat left her post as chief financial officer of Morgan Stanley earlier this year to become Google's CFO. Sarah Friar, a Goldman alum, is now CFO of Square, the payments company started by Twitter co-founder Jack Dorsey. Ex–Goldman banker Anthony Noto is Twitter's CFO.

Wall Street used to wait for startups to go public before investing in them. These days, however, entrepreneurs don't need the public markets like they used to; private capital is plentiful. Uber has raised some $6 billion in equity and debt, and it hasn't announced any plans to go public. "By the time you IPO as a company with a $60 billion market cap, you are really in the stratosphere," says Joshua Spencer, manager of T. Rowe Price's Global Technology Fund. "The opportunity to invest has passed; the explosive growth is often behind them."

This market moves fast: When Airbnb raised money in April 2014, the company was valued at $10 billion; a year later, that valuation had more than doubled to $25 billion, when it raised another $1.5 billion. Included in the latest round were East Coast investors, most of whom would never have invested at such an early stage in the last tech boom: Fidelity Investments, T. Rowe Price, and Tiger Global Management—all now prolific operators in Silicon Valley.

For Goldman, however, this isn't just about chasing returns. Startup investing isn't a game changer for a firm with a $95 billion market cap and $860 billion in total assets on its balance sheet. "The return-on-equity impact isn't going to be that intense," says Jeffery Harte, an analyst who covers financial institutions at Sandler O'Neill & Partners. But, he says, "being on the cutting edge of technology has become more important then ever."

Goldman's approach to startup finance is complex and expansive, much like Goldman itself. Deals can originate with investment bankers; the securities division, which can make strategic investments; or private banking. While some groups invest client money, others use the firm's own, and still others provide traditional investment banking services. Goldman's first deal with Uber, in 2011, was an equity bet; its second, in January, was debt.

Goldman's venture gambit comes at a time when it is fashionable to chase entrepreneurs and talk up one's tech savvy. "We are a technology company," CEO Lloyd Blankfein said in a May podcast on the firm's website. Blankfein hosted Goldman's annual shareholders meeting in San Francisco this spring to show the firm is part of the scene. "You better spend a lot of time there," he said, "and we do."

Goldman's aim isn't just to invest in tech companies but also to learn from them and even emulate them. The firm and its clients—big corporations, private-wealth customers, asset managers—are struggling to navigate the new markets technology is creating. Banking and finance, in particular, expect to be hit with big upheavals. Startups such as peer-to-peer banker LendingClub and Wealthfront, a financial advisory platform, are aiming to pick off just about every part of the industry. We "try to disrupt ourselves," Blankfein said.

Still, the startup world is very different from the public markets Goldman has dominated for so long. And the firm has been burned in techland before: It took Webvan and EToys public in 1999 only to see both blow up within two years.

Tech founders reject—outwardly at least—the qualities that Goldman's name evokes: secrecy, opacity, hierarchy. To win its place, the firm is starting to change. "We have shifted our thinking in that the role we need to play is not just a role that you can measure in the four walls of Goldman Sachs," Don Duet, co-head of the firm's technology division, says in an interview. "The disruption technology is going to create, and already has, in our industry is going to be profound. We have to make sure we are not left behind."

All this sounds great, but transforming this 146-year-old institution will take more than just talk. And so to win its place, Goldman is starting to open itself up in ways that once would have been unimaginable. It's letting in outsiders, forging new partnerships, and showing its vulnerabilities—even learning to become less secretive.

'YOU BETTER SPEND A LOT OF TIME THERE,' GOLDMAN CEO BLANKFEIN SAYS OF SILICON VALLEY. 'AND WE DO.'

ONE MORNING IN January, Goldman tweeted a picture of Marty Chavez, its chief information officer, on the firm's New York trading floor. What's remarkable about the shot isn't that the executive is wearing a hoodie or has Beats by Dre headphones wrapped around his neck. The strange part is who else is in the picture: a crew of software engineers—all in the same exact hoodies—from Kensho, a data analytics startup. Chavez had invited its engineers to spend two weeks on the Goldman trading floor and "hack" one of the most-guarded technology platforms in the world.

In November, Goldman's principal strategic investment group led a $15 million round in Kensho. That group, part of sales and trading, aims to invest in companies that have "direct benefit to clients," a spokeswoman says.

For a startup such as Kensho (the name comes from a Buddhist term in Japanese for *seeing nature*) to get access to Goldman's trading software is huge. The company essentially is trying to build a machine that could one day displace a swath of Wall Street. Its software aims to reduce human decision making in trading and investing by instantaneously analyzing slews of data that move markets—the weather, political elections, wars, natural disasters. Kensho is trying to woo banks like Goldman as potential customers.

While the group from Kensho never had access to any customer or sensitive data—Goldman says it tightly follows policies set by regulators governing these issues—it did get an extraordinary look inside the Goldman machine. The developers came away with ideas for how to integrate its system with Goldman's and potentially its clients and competitors.

Why would Goldman let these outsiders in? It needs them. The great innovations of our time aren't emerging out of a Henry Cobb glass tower overlooking the Hudson River. They're coming out of companies such as Kensho. Goldman needs to learn from them—to understand how they work, how they think, and how they plan to dismantle just about every industry Goldman makes money in, including its own.

When the software engineers from Kensho first arrived on the trading floor, they weren't sure of how the rank and file at Goldman would receive them. But it became clear that word had come from on high—Chavez in particular—to give them the access they needed. "Marty gave us a lot of air cover," says Adam Broun, chief operating officer of Kensho.

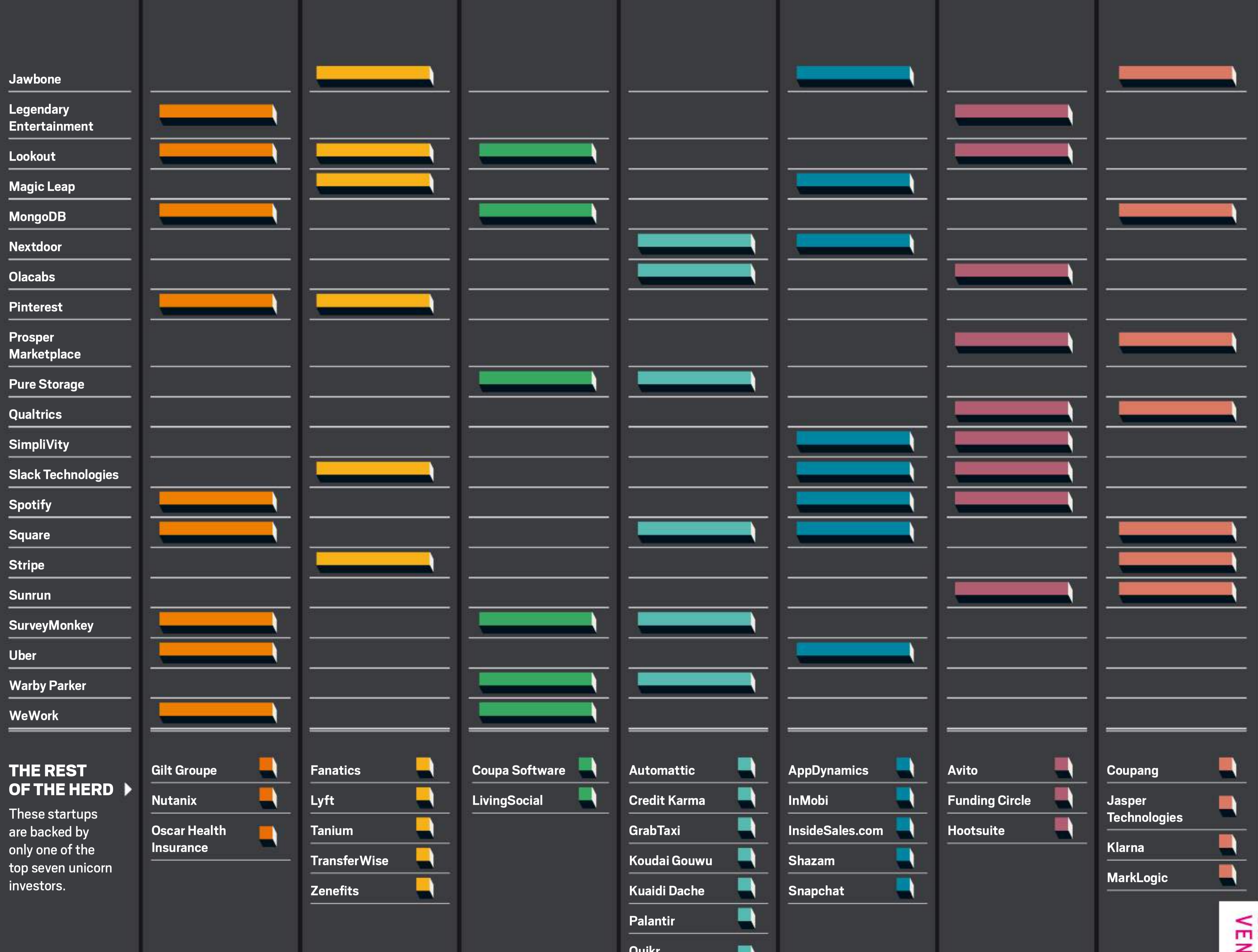
Chavez is a bridge of sorts between the firm and the young startups it pursues. He's built a reputation among the tech elite as a guy who gets it. "Marty is a pure believer in all this stuff," says Aaron Levie, the 29-year-old CEO of Box, a cloud storage provider that went public earlier this year. It helps that Chavez is a hacker himself.

COURTESY OF GOLDMAN SACHS

Employees of Kensho participate in a 'hackathon' at Goldman Sachs in New York, with Goldman information chief **Marty Chavez**, center, with headphones.

UNICORN HUNTERS

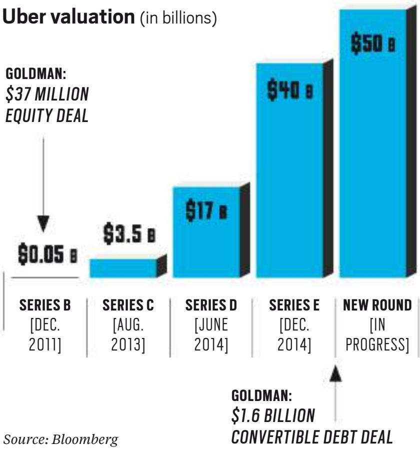
GOLDMAN SACHS HAS ELBOWED ITS WAY INTO AN ELITE GROUP OF INVESTORS THAT ARE BACKING PRIVATE STARTUPS VALUED AT $1 BILLION OR MORE.



The companies listed may have additional investors.
Source: CB Insights

UBER RICH

GOLDMAN SACHS WAS AN EARLY EQUITY INVESTOR IN CAR-BOOKING APP UBER, WHOSE SOARING VALUATION DWARFS RETURNS ON TRADITIONAL INVESTMENTS.



Source: Bloomberg

Growing up in New Mexico, he learned how to program computers. At 15, Chavez worked on writing code for neutron bomb simulations for the Air Force Research Laboratory at Kirtland Air Force Base in Albuquerque, New Mexico. He attended Harvard, completing degrees in biochemical and computer sciences, and earned a Ph.D. in medical information sciences from Stanford. He co-founded two of his own software companies and did stints at Goldman and Credit Suisse. He'd planned to retire after selling his last business when Goldman asked him to return to the firm. He went back in 2005 and become a partner in 2006 and CIO in 2013.

Chavez has helped make the technology department a power center of the firm, and he's pushed Goldman to aggressively pursue top tech talent. The firm's technology division now employs more than 9,000 people, nearly one-third of its workforce. (In comparison, JP Morgan Chase in a 2013 letter to shareholders reported 30,000 tech employees, approximately 12 percent of its workforce.) By head count, tech is now the biggest division inside Goldman; it has more software engineers and developers than bankers and traders, and they can even play a role in shaping Goldman's business.

Last fall, Goldman's software engineers came across a new open source platform from a company named Docker. It was so effective in helping them build and develop applications for Goldman's system that its engineers began using it more and more. It wasn't long before their bosses took notice. "The excitement around Docker, I've not seen anything like that since Java came along," says Goldman's Duet, referring to the programming language Sun Microsystems released in 1995.

Duet began playing around with the software, too. He soon connected with Docker CEO Ben Golub about ways the firm could help the startup tailor its platform for the financial services industry, which has more complicated regulatory and compliance issues than many other Docker customers. "We've had some in-depth sessions about how they would use Docker in the more sensitive parts of their business," says Golub.

In April, when it came time to pick his investors for a $95 million round that valued the company at $1 billion—and launched it to unicorn status—Golub chose Goldman. The bank joined a group that also includes Greylock Partners, Benchmark Capital, and other top VCs. When asked how Goldman made the cut, Golub explains, "It was really attractive for us to work with people like [those at] Goldman." He says he thinks of the bank as "not only a financial institution but also a technology company."

"THEY CALLED ME out of the blue," recalls Avinoam Nowogrodski, founder and CEO of Clarizen, an enterprise software platform. In late 2013, he recalls getting a call from Goldman's private capital investing group. Nowogrodski was about to start fundraising, and the Goldman team wanted in. "They told us, 'Don't go to the round; we'll do it all,'" recalls Nowogrodski. The entrepreneur told Goldman he wanted to talk to other investors before deciding.

Among founders, Goldman doesn't carry the same clout as it does on Wall Street. Entrepreneurs aren't swayed by big checks; often they want investors who've walked in their shoes, who've taken an untested idea and built it into a successful business. That's why Netscape entrepreneur Marc Andreessen and PayPal and LinkedIn co-founder Reid Hoffman are among the most sought-after VCs in Silicon Valley. And even entrepreneurs-turned-VCs have to hustle. "In this world, the men and women who run the company are the ones who decide who they want as investors," says Jerry Yang, a co-founder of Yahoo! who now backs startups. "The rest of us, as investors, have to earn those rights to be a part of a round."

To help woo startups, the most successful venture capitalists are willing to roll up their sleeves and really help build a company, not just take a board seat. Greylock has assembled a large recruiting network—famous around Silicon Valley—and helps its entrepreneurs hire top tech talent.

> TECH FOUNDERS REJECT—OUTWARDLY AT LEAST—THE QUALITIES THAT GOLDMAN'S NAME EVOKES: SECRECY, OPACITY, HIERARCHY.

BLOOMBERG TIPS

Tracking Goldman's Investments

You can use the Private Equity Overview (PE) function to see a list of companies that Goldman Sachs has invested in. Type **PE <Go>** on the Bloomberg Professional service. Tab in to the field, enter *GOLDMAN*, and click on the Goldman Sachs Group Inc match under General Partners. In the Description screen that appears, click on Portfolio. For a list of tech companies that Goldman has invested in or sold in the past 12 months, click on the numbers to the right of Technology under 12M Chg in the upper-right corner of the screen. For details of Goldman's investment in Science-Logic, for example, click on the company's name and type 11 <Go>. JON ASMUNDSSON

Andreessen Horowitz offers a menu of services to entrepreneurs, including introductions to corporate executives who could be customers. "I could have never gotten all those meetings on my own," says one founder, Orion Hindawi, chief technology officer of Tanium, a security software developer, who credits Andreessen Horowitz for introducing him to dozens of potential corporate clients and helping him source millions of dollars in new business so far this year. (Bloomberg LP is an investor in Andreessen Horowitz.)

Entrepreneurs say Goldman's pitch in some ways mimics Andreessen Horowitz's, offering small companies a range of resources. "They have a whole menu of choices," says Larry Augustin, CEO of SugarCRM, an enterprise software company backed by Goldman's private capital investing group. He says the firm has introduced him to a team dedicated to helping startups with everything from basic administrative troubleshooting to broad strategic insights. For example, Augustin says, Goldman helped him benchmark his customer acquisition costs against those of his competitors'. Another entrepreneur says Goldman provided assistance crunching numbers and assessing potential acquisitions. This kind of expertise, two guys in a garage could never re-create.

The firm has also established a group called Emerging Entrepreneur Coverage that's headed up by Managing Director Miyuki Matsumoto. On her personal website, she describes her job as "identifying and developing relationships with promising, early-stage entrepreneurs."

Many entrepreneurs say that Goldman's biggest draw is its access to the international capital markets. Startups today must move faster into global markets than ever before. Founders used to be able to wait to think about international expansion; today, they have to think globally from the outset, partly because locals will quickly copy the best ideas. (An outfit called Rocket Internet has incubated Zappos, EBay, and Square clones in Europe, for example.) From Day One, "you have to think, 'How do I get big enough so I can compete on a global scale and knock off all these competitors who pop up?'" says Alfred Lin, a partner at Sequoia Capital who was chief operating officer at Zappos.

Goldman has a network of clients around the globe who can help unseasoned entrepreneurs find their footing in new markets. Its wealth-management clients and corporate customers are some of the most influential business leaders in the world. They can broker introductions, explain regulations, and be a local booster in tough markets such as China and India.

"They have a lot of connections in the markets we want to be in," Clarizen's Nowogrodski explains. To tap into these, he ultimately chose Goldman as the lead investor in a financing round that ended up raising $35 million. And he put Goldman Vice President Hillel Moerman on his board.

LAST YEAR, GOLDMAN PARTICIPATED IN 33 DEALS. IN THE FIRST HALF OF THIS YEAR, IT JOINED ANOTHER 22 DEALS.

When Travis Kalanick, CEO of Uber, was getting ready to expand into new markets, he brought Goldman in as an investor. "We are going global with big funding," he blogged after inking his first deal with Goldman in 2011, back when the transportation company was still valued in millions. While he didn't call Goldman out by name, he said the fundraising round was "the cornerstone for the next phase of the company, making Uber a global transportation and logistics brand." Since then, the company has launched in China, India, Europe, and beyond. (Goldman, meanwhile, doubled down on Uber, orchestrating a $1.6 billion convertible debt deal in January; the ride-share app was then valued at $40 billion.)

For anyone who lived through the dot-com bust of the early 2000s, it's hard not to wonder: Are we in another tech bubble? "I don't have amnesia," Blankfein said in his May podcast, responding to a question about the heady valuations of technology companies. Now as Uber's valuation rivals General Motors' and Airbnb's surpasses Marriott's, investors are starting to feel uneasy. "I do think you'll see some dead unicorns this year," legendary venture capitalist Bill Gurley told an audience at SXSW in March.

Still, Blankfein recalled, many investors scoffed at Amazon.com's tippy valuation in the early 2000s. "Turn the clock forward another dozen years and look at the success and the reach and the importance and the influence of Amazon," he said.

If anything, Goldman is stepping up its bets on tech. Last year, it participated in 33 deals. In the first half of this year, it participated in another 22 deals—including Spotify's $8 billion round in June. Goldman is also incubating its own startups: The firm has announced plans to launch an online lending service, and it has led the development of Symphony, a secure Twitter-like service for traders and bankers that could compete with Bloomberg's IB chat platform. It's also eyeing startups throughout Asia, a market that most U.S. venture firms have barely penetrated. Goldman's private equity group in Asia in January led a $56 million round in Singapore-based Antuit, a big-data storage platform.

Earlier this year, Blankfein traveled to Beijing to speak to students at Tsinghua University. As he spoke, the veteran Wall Streeter became especially animated when talking about how technology is increasing opportunities for his young audience. He told them, "If only I were 40 years younger." If he were, perhaps Goldman would be investing in his startup. BM

Travis Kalanick, CEO of Uber, which Goldman is financing with equity and debt

DAVID PAUL MORRIS/BLOOMBERG

Three Reforms Take Investment Service in Indonesia to the Next Level

Indonesia, the largest economy in Southeast Asia, is now becoming one of the most attractive investment destinations in the world. In the last five years, the total of investment realization in the G-20 member state increased by 22.4% in average, reached US$43 billion last year.

However, the Government of Indonesia (GoI) is aware that doing business in the world's largest archipelagic nation is not the easiest. Quality infrastructure and logistics costs, inefficient business licensing, corruption, regulation and policy issues, as well as labor issues are among the main concerns of investors in Indonesia.

The Government has recognized these issues and is working through the Indonesia Investment Board (BKPM) to implement three reform priorities.

President Joko Widodo is flanked by the Chairman of BKPM Franky Sibarani, inaugurate Indonesia's One Stop Service (OSS) Center

First, the improvement of business licensing

President Joko Widodo inaugurated the national one-stop integrated service (OSS) center for investment at the BKPM earlier this year. Investors can now process investment licenses at BKPM without having to liaise with other ministries/institutions. This allows authorities to reduce the process time, synchronize procedures, avoid authority overlap, and eliminate red tape.

Second, the debottlenecking of investment realization

Recently, BKPM had solved a number of problems hampering investment of 22 companies worth US$99 billion, out of 88 companies under facilitation since last year. The issues are mainly related to the land acquisitions, misuse of permits, supply of raw materials, cooperation contracts, and tax regulation.

The board is also strengthening its end-to-end service for investors, from identifying and exploring investment interests, facilitating investors to obtain principal license, to realizing their investment plans.

Third, the development of investment climate by improving both fiscal and non-fiscal facilities

Indonesia offers fiscal facilities for investors, among other things, in forms of tax holiday, tax allowance, and import duty facility. The GoI aims to reduce the investment licenses processing time to maximum 15 days for each type of permit and reduce starting-a-business procedure from seven to only five steps.

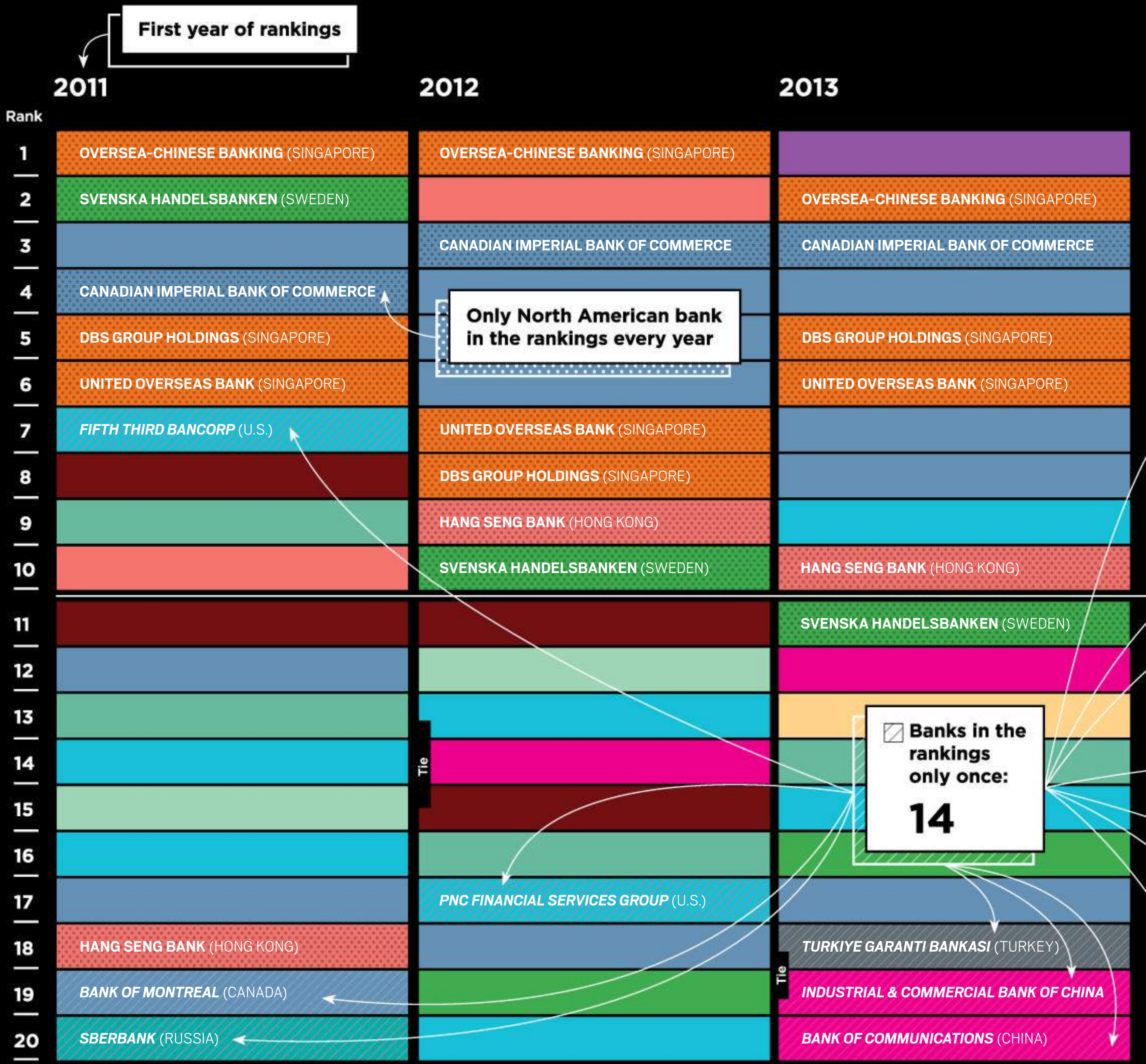
BKPM, supporting the new government initiatives is keen to encourage investment in key sectors namely infrastructure, manufacturing, maritime and tourism. To facilitate investor's access, the agency has also instituted a number of representative offices, namely the Indonesia Investment Promotion Centre (IIPC) in Abu Dhabi, London, New York, Seoul, Singapore, Sydney, Taipei, Tokyo and China office will soon to be opened. ●

BKPM
Indonesia Investment Coordinating Board

For more information on OSS Center and investing in Indonesia, please visit our website:
www.bkpm.go.id

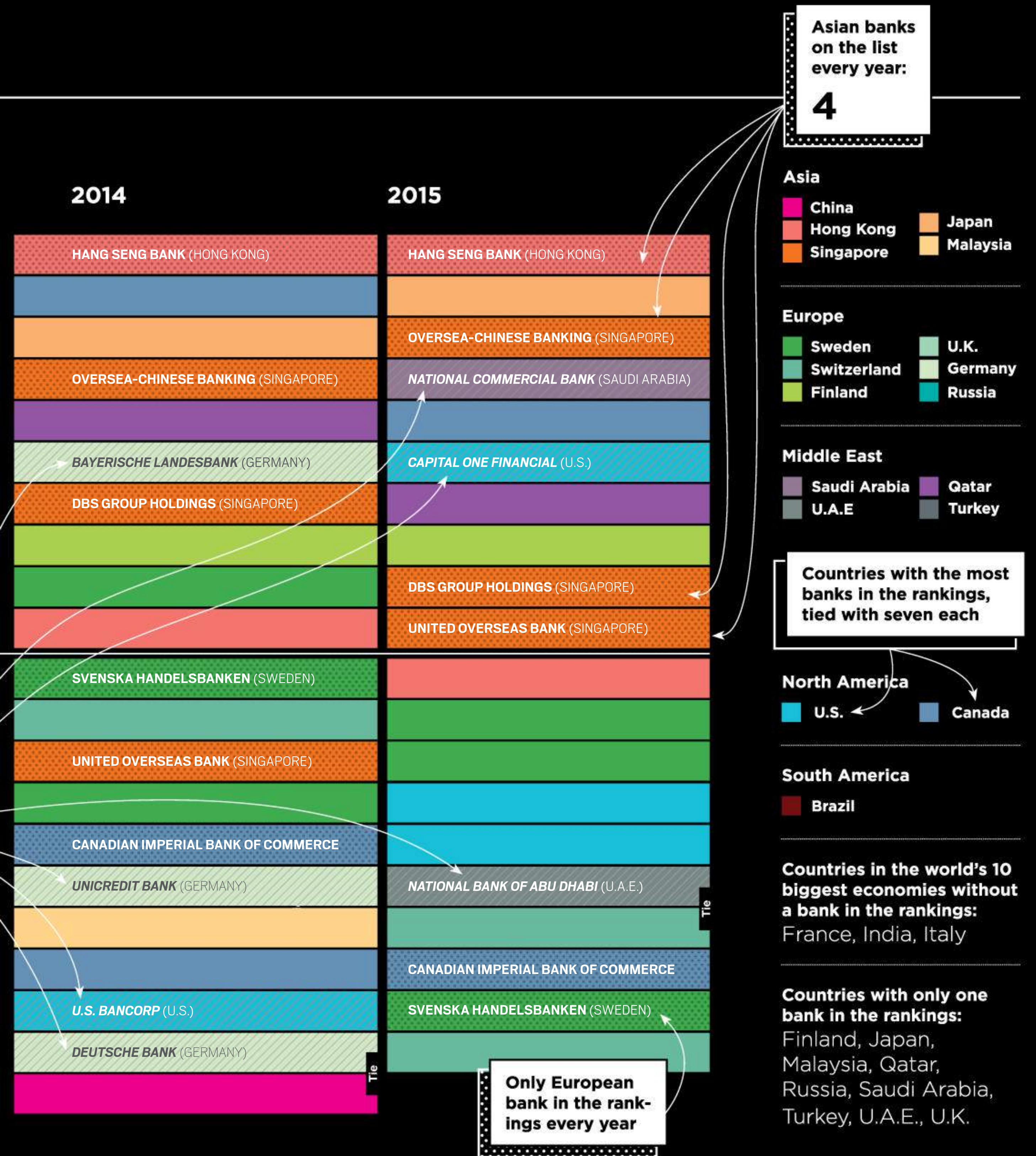
HONG KONG LENDER HANG SENG, NO. 1 FOR THE SECOND STRAIGHT YEAR, HAS BEEN IN EVERY TOP 20 RANKING SINCE 2011.

THE WORLD'S



By Alfred Liu and Elena Logutenkova

STRONGEST BANKS



HANG SENG BANK CAN OFFER some advice to its ailing parent, HSBC Holdings: Stay local, stick to retail and commercial banking, and serve your customers snake soup.

From its base in Hong Kong, Hang Seng tops *Bloomberg Markets*' ranking of the world's strongest banks for the second year in a row—by being everything HSBC isn't. While the two share roots in Hong Kong, HSBC embarked on a global expansion to become Europe's largest lender. It moved its headquarters to London in 1993 and set up shop in almost every major country.

Now, HSBC is struggling to reduce costs. The 150-year-old bank, which bought its first stake in Hang Seng in 1965 and today owns 62 percent, has announced about 87,000 job cuts since 2011. "The time of the global financial conglomerates is coming to an end," says Ismael Pili, a Hong Kong–based analyst at Macquarie Group who rates Hang Seng underperform. "What you should really be doing is trying to be strong in your domestic market." Gareth Hewett, an HSBC spokesman in Hong Kong, declined to comment.

Hang Seng is embracing that strategy. It has peppered Hong Kong's subway stations and malls with its lime-green signage. More than half of residents 18 and older bank at its 240 outlets in Hong Kong. That presence makes Hang Seng Hong Kong's No. 2 bank in terms of branches and provides a solid base of deposits from which to expand corporate lending and wealth management. CEO Rose Lee, 62, caters to her most-valued clients in the company's 24th-floor dining room over a broth infused with five kinds of finely chopped snake meat. Hong Kongers swear the brew nourishes their blood.

The invigorating powers of snake soup aside, Hang Seng is benefiting from rising wealth in Hong Kong and mainland China. It's one of six Asian banks in Bloomberg's top 20—five of them in the top 10. Japan's Norinchukin Bank repeats in second place. Singapore's Oversea-Chinese Banking is No. 3 in our fifth annual ranking of lenders whose assets total $100 billion or more. Two other Singapore banks are ninth and 10th.

Across Asia, the International Monetary Fund expects gross domestic product growth to average 5.6 percent this year, triple the European Union's 1.8 percent. And Asia's rich are getting richer. The 4.69 million individuals in the Asia-Pacific area with at least $1 million in assets boosted their combined wealth 11 percent last year to a total of $15.8 trillion, the fastest pace in the world, Royal Bank of Canada and Cap Gemini say. "Asian banks stand out because of the huge wealth creation in the region," says Arthur Kwong, head of Asia-Pacific equities at BNP Paribas Investment Partners in Hong Kong. "A lot of the banks are well capitalized."

Asia's strongest lenders, and their global counterparts, are improving the quality of their capital. Cooperative bank Norinchukin lost 572 billion yen ($4.7 billion) in the fiscal year that ended in March 2009 when it bet the cash of its members, mostly farmers and fishermen, on toxic U.S. mortgage-backed securities. Today, CEO Yoshio Kono is investing in high-grade bonds at home and abroad, including sovereign debt. "Our goal is to keep capital at a level that's sufficiently above what is required globally," says Shinichi Saitoh, a senior managing director at Norinchukin. The bank has a 17.6 percent ratio of Tier 1 capital to risk-weighted assets for the ranking period, putting it fifth in the high-quality-capital category that includes equity and some subordinated debt.

The Basel Committee on Banking Supervision has been pushing all banks to improve capital standards. The latest measures, known as Basel III, more than triple the minimum amount of core capital lenders need to at least 7 percent of their risk-weighted assets. National regulators can set stricter rules. Bloomberg's ranking considers capital strength among its five ranking criteria. The others are nonperforming assets, loan-loss reserves, deposits, and efficiency. (See chart, opposite page.) Bloomberg is displaying a bank's assets in the chart for the first time this year.

If Hang Seng has a weakness, it's mainland China. Its Shanghai-based unit has about 50 outlets in major cities. The bank

Hang Seng's kitchen cooks up **snake soup** to serve to favored clients.

HANG SENG BANK

THE WORLD'S STRONGEST BANKS

Rank	Bank	Overall score ▼	Tier 1 capital to risk-weighted assets ▲	Nonperforming assets to total assets ▼	Loan-loss reserves to nonperforming assets ▲	Deposits to funding ▲	Efficiency ratio ▼	Assets, in billions
1	**HANG SENG BANK** (HONG KONG)	20.6	15.6	0.2	83.4	94.9	52.1	*$163.0*
2	**NORINCHUKIN BANK** (JAPAN)	20.9	17.6	0.2	85.1	77.2	11.3	*806.7*
3	**OVERSEA-CHINESE BANKING** (SINGAPORE)	23.0	13.8	0.3	173.7	83.3	39.9	*302.9*
4	**NATIONAL COMMERCIAL BANK** (SAUDI ARABIA)	23.4	14.7	0.7	180.0	88.1	39.6	*115.8*
5	**DESJARDINS GROUP** (CANADA)	24.7	15.8	0.2	89.2	86.5	73.4	*197.7*
6	**CAPITAL ONE FINANCIAL** (U.S.)	25.1	13.2	0.4	387.5	80.9	54.6	*308.9*
7	**QATAR NATIONAL BANK** (QATAR)	27.9	16.2	1.1	124.2	86.5	22.2	*133.5*
8	**OP FINANCIAL GROUP** (FINLAND)	29.4	15.5	0.3	173.1	64.8	64.0	*133.6*
9	**DBS GROUP HOLDINGS** (SINGAPORE)	30.9	13.1	0.6	141.9	85.7	44.1	*332.7*
10	**UNITED OVERSEAS BANK** (SINGAPORE)	31.0	13.9	0.8	132.9	87.6	42.2	*231.6*
11	**BOC HONG KONG (HOLDINGS)** (HONG KONG)	31.9	12.4	0.1	151.3	83.7	41.5	*282.4*
12	**SEB** (SWEDEN)	36.7	19.5	0.4	58.1	52.4	47.5	*338.6*
13	**SWEDBANK** (SWEDEN)	37.0	22.4	0.3	52.0	38.8	45.9	*272.0*
14	**CITIGROUP** (U.S.)	38.1	13.1	0.4	217.1	60.9	72.6	*1,842.5*
15	**BB&T** (U.S.)	38.2	12.4	0.4	188.5	82.7	63.7	*186.8*
16	**NATIONAL BANK OF ABU DHABI** (U.A.E.)	39.0	19.4	0.2	43.4	67.5	90.9	*102.4*
–	**UBS** (SWITZERLAND)	39.0	15.0	1.6	108.2	77.4	35.5	*1,068.8*
18	**CANADIAN IMPERIAL BANK OF COMMERCE** (CANADA)	39.1	12.2	0.3	115.8	92.1	61.8	*367.9*
19	**SVENSKA HANDELSBANKEN** (SWEDEN)	39.7	22.1	0.3	47.2	41.5	45.2	*361.1*
20	**CREDIT SUISSE GROUP** (SWITZERLAND)	40.9	17.1	0.2	48.6	49.8	77.2	*927.1*

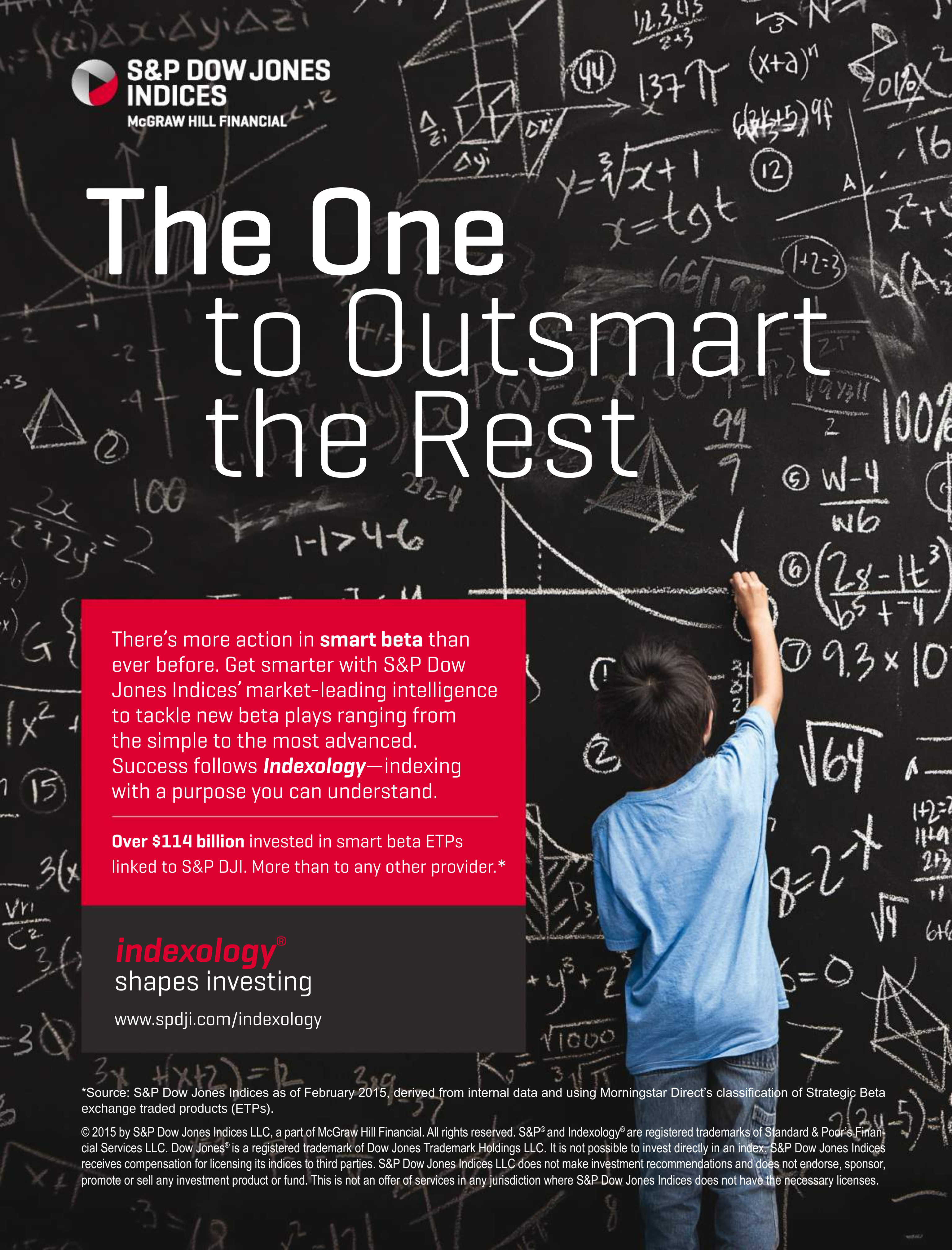
▼ Smaller number means higher ranking | ▲ Bigger number means higher ranking | Banks on the list every year | First appearance of bank | Asia | Europe | North America | Middle East

Source: Bloomberg

HOW WE CRUNCHED THE NUMBERS

To identify the world's strongest banks, we used the Equity Screening (EQS) function on the Bloomberg Professional service to obtain a list of public and private banks with total assets of $100 billion or more as of June 1. The banks were evaluated in five categories. The ratio of a bank's Tier 1 capital to its risk-weighted assets accounted for 40 percent of each bank's overall score. The ratio of nonperforming assets to total assets got a weighting of 20 percent, as did the ratio of reserves for loan losses to nonperforming assets. The ratio of deposits to funding accounted for 15 percent of the score. And the efficiency ratio, which compares costs with revenues, received a 5 percent weighting. Banks were ranked on each criterion, and the ranking positions were weighted and combined to determine the banks' overall scores. Lenders that reported a loss in net income were excluded. All data are for the banks' latest fiscal year, which in most cases ended on Dec. 31, 2014. (Norinchukin Bank and a few Indian banks have a March-ending fiscal year; their ranking was based on data for the year ended on March 31, 2014.) Only banks that provided Bloomberg with data in all five categories were considered. In total, 114 banks were ranked; 13 of them are private.

LAURIE MEISLER
BLOOMBERG RANKINGS


S&P DOW JONES INDICES
McGRAW HILL FINANCIAL
The One to Outsmart the Rest
There's more action in **smart beta** than ever before. Get smarter with S&P Dow Jones Indices' market-leading intelligence to tackle new beta plays ranging from the simple to the most advanced. Success follows ***Indexology***—indexing with a purpose you can understand.
Over $114 billion invested in smart beta ETPs linked to S&P DJI. More than to any other provider.*
indexology®
shapes investing
www.spdji.com/indexology

focuses largely on Hong Kong companies that want to do business on the mainland rather than on retail customers. Those companies are facing slowing growth: China's GDP increased 7.4 percent last year, down from an average of 9.8 percent during the past four decades. Chinese banks' bad loans surged in the first quarter by the most since at least 2004, with defaults spreading to state-owned giants. Because of China, Hang Seng more than doubled its provision for bad loans last year to HK$1.14 billion ($147 million). Even so, it isn't retreating from the world's second-largest economy. "We won't scale back our China business," Lee said during an earnings press conference in February. "Instead, we will focus more on customers that are doing business in both China and Hong Kong." She declined to comment for this story.

Capital strength buoyed the top banks of Europe. No. 13 Swedbank suffered the biggest losses of any major lender in the Nordic countries in 2009. CEO Michael Wolf took the helm that March and raised a total of 27.5 billion kronor ($3.3 billion) in two share sales to improve the bank's capital ratio. Today, Swedbank is the ranking's best capitalized, with a 22.4 percent Tier 1 capital ratio.

Europe tied Asia with six lenders in the top 20—thanks primarily to Nordic banks. Sweden's regulator has been raising capital requirements for the biggest banks since 2011. Swedbank and two other Swedish banks posted the highest capital ratios in our ranking. "Nordic banks are as safe as they could be," says Wilhelm Heinrichs, a fund manager at Allianz Global Investors in Frankfurt.

It wasn't always that way. Annika Falkengren, chief executive of No. 12 SEB, is focusing on high-quality capital and cautious domestic lending after leading the bank through the financial crisis. When Falkengren, 53, became CEO in 2005, she says, she knew of potential risks in the Baltic states of Estonia, Latvia, and Lithuania from a credit-fueled housing boom. But she didn't anticipate the shock that followed Lehman Brothers' bankruptcy in 2008. To shore up the bank after losses in the Baltics, Falkengren raised 15.1 billion kronor in a 2009 share sale. She cut 1,500 jobs and reduced the bank's reliance on short-term borrowing to improve its funding profile. Then she began building capital buffers and has continued to bolster equity to this day. "Ever since Lehman, I had a very strong focus

REGIONAL LEADERS

OVERALL SCORE — SMALLER NUMBER MEANS HIGHER RANKING

Asia

		Overall score
1	**HANG SENG BANK** (HONG KONG)	20.6
2	**NORINCHUKIN BANK** (JAPAN)	20.9
3	**OVERSEA-CHINESE BANKING** (SINGAPORE)	23.0
4	**DBS GROUP HOLDINGS** (SINGAPORE)	30.9
5	**UNITED OVERSEAS BANK** (SINGAPORE)	31.0

Middle East and Africa

		Overall score
1	**NATIONAL COMMERCIAL BANK** (SAUDI ARABIA)	23.4
2	**QATAR NATIONAL BANK** (QATAR)	27.9
3	**NATIONAL BANK OF ABU DHABI** (U.A.E.)	39.0
4	**STANDARD BANK GROUP** (SOUTH AFRICA)	48.8
5	**BANK HAPOALIM** (ISRAEL)	70.8

North America

		Overall score
1	**DESJARDINS GROUP** (CANADA)	24.7
2	**CAPITAL ONE FINANCIAL** (U.S.)	25.1
3	**CITIGROUP** (U.S.)	38.1
4	**BB&T** (U.S.)	38.2
5	**CANADIAN IMPERIAL BANK OF COMMERCE** (CANADA)	39.1

Europe

		Overall score
1	**OP FINANCIAL GROUP** (FINLAND)	29.4
2	**SEB** (SWEDEN)	36.7
3	**SWEDBANK** (SWEDEN)	37.0
4	**UBS** (SWITZERLAND)	39.0
5	**SVENSKA HANDELSBANKEN** (SWEDEN)	39.7

South America*

		Overall score
1	**ITAÚ UNIBANCO HOLDING** (BRAZIL)	58.9
2	**BANCO SANTANDER BRASIL** (BRAZIL)	63.3
3	**BANCO BRADESCO** (BRAZIL)	70.8
4	**BANCO DO BRASIL** (BRAZIL)	81.0

**Only four banks in South America meet the requirement of having $100 billion in assets. Source: Bloomberg*

on creating a rock-solid balance sheet," Falkengren says.

At the end of 2014, SEB had a 19.5 percent Tier 1 capital ratio, a low ratio of nonperforming assets to total assets, and a 15.3 percent return on equity, profitability most major European banks can only dream of. HSBC and Deutsche Bank, Germany's biggest bank by assets, are struggling to hit 10 percent.

Falkengren remains careful as she seeks to grow in the Nordic countries and Germany and slowly moves into the U.K. In corporate banking, SEB lends mainly to blue-chip clients such as Electrolux, Europe's biggest home appliance maker, and others it knows well. For retail customers, it's limiting the sum Swedes can take out in mortgage loans to five times their household's gross annual income. "We're trying to make sure our clients are not taking too much risk," she says.

Like Hang Seng and Norinchukin, Singapore's strongest banks are targeting markets they know well. That's helping them curb bad debts and build a strong capital base, says Jean-Charles Sambor, Asia-Pacific director at the Institute of International Finance. The Tier 1 capital ratio at Oversea-Chinese Banking and the other Singapore banks exceeded the Basel III guideline at the end of 2014.

Oversea-Chinese Banking, Southeast Asia's second-largest lender by market value, has ambitions beyond plain banking in Asia. It operates in 18 countries from Malaysia to China and was among the first to reopen a branch in Myanmar this year after 49 years of military rule. "Our strategic direction is to become a leading, well-diversified Asian financial services group with a broad geographical footprint," CEO Samuel N. Tsien says. He says the ability to get funding and revenue from both developed and emerging Asian markets helps stabilize the bank's capital base when regional economies fluctuate.

Canada, which dominated the 2012 ranking that considered banks' 2011 fiscal years, has two entries in the top 20: Desjardins at No. 5 and Canadian Imperial Bank of Commerce at No. 18. CIBC is the only North American bank to appear in the ranking all five years.

The U.S. has three entries: newcomer Capital One Financial in McLean, Virginia, at No. 6; No. 14, Citigroup; and No. 15, Winston-Salem, North Carolina–based BB&T, the ninth-largest U.S. commercial bank by assets. New York–based Citigroup, the world's twelfth-largest bank in terms of assets in the ranking period, is the only large global lender among the 20 strongest. The biggest U.S. banks by assets, led by JPMorgan Chase and Bank of America, didn't make the list.

Capital One—with its quirky ads that ask, "What's in your wallet?"—gets its strength from U.S. consumers and their prolific credit card spending and abundant auto loans. Richard Fairbank, the only CEO of a top U.S. lender who's still running the company he founded, has transformed the business. Starting with a credit card consulting firm in 1988, Fairbank has built one of the biggest U.S. regional banks and consumer finance companies. His method: announcing acquisitions including Hibernia in 2005, North Fork Bancorp in 2006, and biggest U.S. online lender ING Direct in 2011.

Capital One's consumer push helped it top the loan-loss-reserves-to-nonperforming-assets category. It's benefiting from low credit card delinquencies as U.S. banks' quarterly write-offs on the cards slid to less than 3 percent last year, the U.S. Federal Reserve says. The bank's consumer focus has also brought scrutiny. In 2012, the Consumer Financial Protection Bureau ordered Capital One to pay $210 million to settle charges of deceptive marketing of such credit card products as identity theft monitoring. The bank didn't admit or deny wrongdoing. The U.S. Justice Department and others are investigating Capital One's subprime-auto-financing business. Julie Rakes, a spokeswoman for Capital One, declined to comment.

'We're trying to make sure our clients are not taking too much risk,' says Annika Falkengren, CEO of Swedish bank SEB, No. 12 in the ranking.

Another newcomer, National Commercial Bank, joins the top 20 at No. 4, the only Saudi Arabian lender ever to make the ranking. Controlled by the government, it's the second-largest Middle Eastern bank, with assets of almost $120 billion. Saudi oil wealth—a projected $172 billion in export revenue this year—buoys the bank: About 8.4 percent of its deposits, or 28 billion riyals ($7.5 billion), come from the government.

NCB has taken a conservative approach to investments. Its rising nonperforming loans, a significant portion made to the former owners, led the government to take over the bank in 1999. Since then, it's pushed into Saudi Treasuries and expanded retail outlets. "The bank has maintained a very liquid balance sheet," says Murad Ansari, director of equity research at EFG Hermes Holding in Riyadh, Saudi Arabia. "It uses its scale to its advantage, whether that's in retail, where it can attract inexpensive deposits and do more lending, or in corporate, where it uses its large equity base to do bigger deals." The bank could suffer from declining oil prices and slow loan growth amid an economic downturn, Ansari says.

Even top banks in Asia face similar risks. Sluggish credit growth, rising competition, nonperforming loans, and the challenge of maintaining high-quality capital are potential problems, BNP's Kwong says. Macquarie's Pili attributes his underperform rating on Hang Seng to its declining interest margins and shrinking market share in nonconsumer loans, among other things.

For Rose Lee and Hang Seng, such issues might mean it's time to reach out to clients over a few more bowls of strength-promoting snake soup. BM

With assistance from **Laurie Meisler**, **William Mellor**, **Elizabeth Dexheimer**, **Matthew Martin**, **Chanyaporn Chanjaroen**, **Shingo Kawamoto**, **Finbarr Flynn**, and **Niklas Magnusson**.

A **glittering skyline** belies the fact that fewer and fewer high rollers are sidling up to the gambling tables these days.

THE ODDS?

DESPITE A SLOWING CHINESE ECONOMY AND SPILLOVER FROM BEIJING'S ANTI-CORRUPTION DRIVE, CASINO OPERATORS ARE DOUBLING DOWN ON THE FORMER COLONIAL OUTPOST.

BY
WILLIAM MELLOR AND **STEPHANIE WONG**

PHOTOGRAPHS BY **PENG YANGJUN**

Barely 10 years ago, Francis Lui and his family were building a relatively modest fortune quarrying rock in Hong Kong and processing slag from blast furnaces on mainland China. Today, in the Chinese enclave of Macau, they preside over two palatial casinos that alone generate vastly more gaming revenue than the entire Las Vegas Strip. ¶ And yet, standing beneath the 24-karat gilded cupolas atop the white-and-gold towers of his flagship, 3,800-room Galaxy Macau resort, Lui insists his journey from grit to glitz hasn't changed his low-key lifestyle. "Personally, I'm not a gambling man," he says.

Shown amid the grandeur of the Galaxy—a casino in **Macau**, right—**Francis Lui** says he prefers walking the dog to playing high-stakes baccarat.

In one sense, that may be true. Lui, 60, prefers walking the family dog to playing high-stakes baccarat or poker. He even hesitates before picking up a deck of cards for a photo shoot. But in reality, the soft-spoken, U.S.-educated billionaire is in the process of placing a far bigger bet than any of the high rollers who wager as much as $250,000 a hand in the Galaxy's most exclusive VIP rooms. Having just spent $3.1 billion doubling the size of the Galaxy, he's now pressing ahead with another $7.4 billion worth of investments. And that's just a part of the $27 billion that global casino companies such as Las Vegas Sands, Wynn Resorts, and MGM Resorts International plan to spend over the next few years in the world's largest but most-troubled gaming market.

Macau, a largely autonomous, 30-square-kilometer (12-square-mile) former Portuguese colony of just 640,000 people, is bigger than any other gaming center because the government in Beijing allows it a casino-gambling monopoly in the world's second-largest economy. It's now in big trouble because it's on the front line of seismic political, economic, and social developments taking place across the border.

A massive corruption crackdown by Chinese President Xi Jinping has scared off Macau's best customers—big spenders who fear they'll be accused of using the territory's 35 casinos and numerous luxury shopping malls to spend or launder ill-gotten gains. Last year, these so-called VIPs accounted for 70 percent of all Macau casino takings. Now, the junket operators who used to bring them to Macau are luring at least some of their clients to other Asia-Pacific gaming destinations, including the Philippines, South Korea, Singapore, Australia, and Cambodia.

Macau's casino owners are also battling a range of increasingly stringent government regulations, ranging from a restriction on the number of gaming tables they can add at new properties to a smoking ban that will force customers as addicted to nicotine as they are to baccarat to spend less time gambling.

It all adds up to a massive slump—just as Lui and his rivals are embarking on a major expansion. Macau's gaming revenue plummeted 37 percent to $15.2 billion in the first half of the year. During the 18 months ended in June, the decline wiped more than $100 billion from the value of six of the world's biggest casino companies. From its January 2014 peak, the Bloomberg Intelligence Macau gaming index had plunged 59 percent as of July 6. In a March 18 report on Macau's implosion, Hong Kong–based investment bank CLSA described it as a "death spiral."

Before the collapse, Lui's father, Galaxy Entertainment Group Chairman Lui Che-woo, 86, was Asia's second-richest individual, with a fortune of $22.5 billion, largely a result of the family's 45 percent stake in the company. By July 6, the elder Lui was almost $12 billion poorer, according to the Bloomberg Billionaires Index.

Undeterred, Francis Lui, who as Galaxy deputy chairman runs the world's second-biggest listed casino empire on behalf of his father, says he can restore investor confidence. He's wagering that the consumer revolution in China will ultimately

trump the impact of the corruption crackdown. Since 1978, 500 million Chinese citizens have emerged from poverty, according to the World Bank.

Although the government is determined to stanch the flood of illicit money leaving the country, it also wants to boost growth and is encouraging legitimate spending by a newly enriched middle class in tourist destinations such as Macau. “We are living here in Macau in one of the biggest economic consumer experiments in the world,” says Grant Bowie, CEO of MGM China Holdings, which next year will open its second Macau casino.

Macau’s fate may be tied to developments on Hengqin, an island triple its size that’s located across a narrow strait. Galaxy is the first of Macau’s six casino licensees to acquire land on Hengqin, which is part of Guangdong province and which Beijing wants to develop into a nongaming leisure destination full of golf courses, Disney-esque theme parks, and other family-focused attractions. In planning a $1.6 billion, 2.7-square-kilometer resort, Lui is betting that Macau—which is linked to Hengqin by a six-lane bridge—can transform itself from a destination whose resorts are more than 90 percent dependent on gambling revenues to a global entertainment hub combining the allure of two of America’s most popular destinations. “It will be like having Las Vegas and Orlando, Florida, right next to each other instead of 2,000 miles apart,” Lui says.

While even a struggling Macau may well generate at least five times the gaming revenues of Las Vegas this year, it won’t be easy for the territory to surpass the desert metropolis as an entertainment center. Macau is far less diversified than Vegas, which last year earned most of its revenue, 64 percent, from shows, hotel rooms, restaurants, and other nongaming sources.

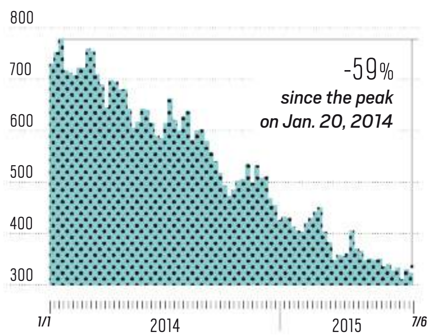
A clutch of the world’s most colorful tycoons are betting big on Macau. They include American billionaires Steve Wynn and Sheldon Adelson. Wynn Resorts and Adelson’s Las Vegas Sands earn more than twice as much casino revenue from Macau as they do from their home market. Then there are the heirs to the estate of the late Kirk Kerkorian; in June, they inherited a 16 percent stake in MGM Resorts International, which derives about one-third of its revenue from the territory. Australian billionaire James Packer’s Melbourne-based Crown Resorts gets almost half its income from Macau.

The city also remains the main business base of three members of the billionaire Ho dynasty, whose patriarch, Stanley Ho, ran gaming in the territory for 40 years before losing his monopoly in 2001. Stanley Ho, now 93 and the father of 17 children, is chairman of SJM Holdings, which owns 20 Macau casinos, including the flagship Grand Lisboa. A daughter, Pansy Ho, 53, is a partner with MGM and co-chairman of its China unit. And a son, Lawrence Ho, 38, is co-chairman and CEO of and a partner with Packer in Nasdaq-listed Melco Crown Entertainment, which operates a casino and hotel complex named City of Dreams.

DOWN ON THEIR LUCK

Slowing growth in China and a dwindling number of high rollers are hurting the casinos.

Bloomberg Intelligence Macau gaming index



These multinational magnates are investing heavily to provide nongaming entertainment, extra hotel rooms, and more shopping for the new mass-market clients they hope to attract. In Lui’s case, that meant doubling the size of a casino that’s been open for only four years. Designed like a high-rise Southeast Asian potentate’s palace, the Galaxy now sprawls over a square kilometer or so of what’s becoming Macau’s main gaming precinct, Cotai. Lui has increased the number of hotels inside the Galaxy complex from three to six, including the world’s first all-suite Ritz-Carlton. Now, he plans to double down again by developing an adjoining chunk of prime land in Macau before starting work across the water on Hengqin. Lawrence Ho and Packer’s Melco Crown plan to open their $3.2 billion Studio City resort later this year, accompanied by a Martin Scorsese–directed promotional film starring Brad Pitt, Leonardo DiCaprio, and Robert De Niro. The still-incomplete Hollywood-themed, Gotham City–like art deco building features what the company says is the world’s first Batman flight simulator. Out back is what Ho and Packer say is Asia’s tallest Ferris wheel, in the shape of a figure eight.

In March, Steve Wynn is due to open a second Macau casino, the $4 billion Wynn Palace. Later in 2016, MGM China, which has had the MGM in downtown Macau since 2007, plans to open a $3 billion, 1,500-room casino built in rectangular blocks to resemble a stack of Chinese jewelry boxes. Also next year, Adelson, whose flagship, eight-year-old Venetian features an indoor Grand Canal plied by singing gondoliers, will open the $2.7 billion Parisian with the requisite Eiffel Tower replica out front. Stanley Ho’s SJM has also turned to France for inspiration. Scheduled to open in late 2017, its $4 billion, 2,000-room Lisboa Palace is partly modeled on Versailles.

It all sounds like a pharaonic exercise in overbuilding. And yet tiny Macau, with only 27,000 hotel rooms, compared with Las Vegas’s 150,000, attracted 31.5 million visitors last year, two-thirds of them from the mainland and many of them day-trippers. The new construction aims to add 19,000 more rooms by 2018.

Macau needs to expand capacity if it is to attract enough mass-market gamblers to offset the dwindling number of high rollers. Even some of the most experienced and successful casino tycoons are “sailing in uncharted territory,” as Adelson, 82, acknowledged on a conference call in April. Adelson’s Las Vegas Sands is the world’s biggest gaming company, and his behemoth Venetian casinos in Las Vegas and Macau have made him the world’s

Putting You at the Heart of Investing

An interview with John Diehl, Senior Vice President, Hartford Funds, where "human-centric" investing is the mantra

Today's investors don't fit the profile of a typical investor a generation ago. From a top-line perspective, what has changed?

The fact is, today's typical investor is living longer. The years they're spending either in retirement or continuing to work form them into a different type of investor. They're seeing their traditional social safety net disappear as pension plans disappear, while social security replaces a smaller portion of their pre-retirement income. Today's investors are also still somewhat tainted by the economic downturn of 2008—they're risk-aware, if not risk-averse. All this has led them to depend more on their financial advisors. Over the last decade, the investment industry transitioned to "fee for advice." However, that advice isn't solely about investments and investment strategy.

To meet these changing expectations and demands from investors, Hartford Funds has adopted a strategy of human-centric investing. What does that mean?

We've been trained to think about investing in a quantitative sense. That's not incorrect. It's just incomplete. Today's investor is also looking for qualitative assessment of what life might be like going forward, and how they might use their wealth to enhance that picture.

Human-centric investing starts with our past, consistent focus: driving long-term growth. But today's investor goes beyond investment performance. They're asking their financial advisors about lifestyle—how are other people transitioning through this next phase of life? It may not be retirement in the traditional sense. It may be a new business opportunity, finding more time to volunteer in their community or new hobbies.

OLIVER ROSSI/GETTY IMAGES

Human-centric investing goes beyond the numbers by encouraging financial advisors to help bridge the gap between wealth creation and wealth utilization. How can investors make the most effective use of the wealth they've created? That can include investment options that help best maintain or grow that wealth, but also advice and ideas outside just the numbers. That could be anything from anticipating the traditional walking-on-the-beach-and-traveling-the-world retirement, or it can incorporate things closer to home, like taking care of aging parents.

How does this change the game for Hartford Funds?

We have to be prepared to provide financial advisors with educational resources that go toward the traditional investment portfolio, and beyond. This might incorporate demographic data, ideas on technology and how it's being used and even perspectives on social issues such as aging in place and caregiving. We've invested in survey data that we've directed ourselves, and work with strategic research partners to help us learn what's changing in terms of consumer behavior and expectations. We use that research to create workshops and materials to educate both financial advisors and their clients, in terms of what they might expect and anticipate in coming years.

How does fund performance tie in to human-centric investing?

Fund performance is table stakes. An investor would not be working with a financial advisor if they didn't expect that the advisor had the competence and resources to deliver investment results. Once they're comfortable that this expectation is being met, they can begin to explore other areas they're interested and engaged in.

We will never take our eye off performance, but we do want to help advisors think about performance differently.

Human-centric investing goes beyond the numbers by partnering with financial advisors to help bridge the gap between wealth creation and wealth utilization.

For the past decade, we have been focusing on understanding investor psychology.

Think of any recent retail experience that was remarkable enough that you told other people about it. At its core, it didn't only satisfy your expectation; at some point, there was something unexpected—they made you feel special or smarter, or anticipated your needs before you spoke to them. That's what the advisor of today needs to think about: the investor experience. Core to that experience is the investment performance and results. If you went to a restaurant and got great service but it was a bad meal, you're not going to go back. We've got to satisfy the expectation, but then go beyond it to create a remarkable experience.

What are some examples of how we might see a fund structured to accommodate human-centric investing?

When you start from a human-centric perspective, it's not just an analysis of what categories funds are flowing into. For example, we hear investors say they're concerned about equity volatility. They're not ready to go full-tilt into the equity markets, especially if they're getting older. They're still oriented toward fixed-income securities, but are also aware of the risk of rising U.S. interest rates—yet much of their portfolio is U.S.-based.

Surveying that landscape, a few years ago we developed a new mutual fund called the Hartford World Bond Fund, which not only incorporates U.S. fixed-income securities, but also utilizes high-quality global government bonds with a focus on limiting volatility if the interest rate in the U.S. rises, with a goal of maintaining liquidity and growth of principal.

At Hartford Funds we will never take our eye off performance, but we feel we must provide more value than just meeting the traditional benchmarks. Human-centric investing is that value. It can help advisors create more individualized and personal outcomes for their clients, which in the long run will lead to happier, more confident clients. The kind of client that stays put. ●

All investments are subject to risk, including the possible loss of principal. Fixed income securities are subject to credit risk, liquidity risk, call risk, and interest-rate risk. As interest rates rise, bond prices generally fall. Foreign investments can be riskier than U.S investments due to specific country, region, and currency risks.

Investors should carefully consider the investment objectives, risks, charges, and expenses of Hartford Funds before investing. This and other information can be found in the prospectus and summary prospectus, which can be obtained by calling 888-843-7824 (retail) or 800-279-1541 (institutional). Investors should read them carefully before they invest.

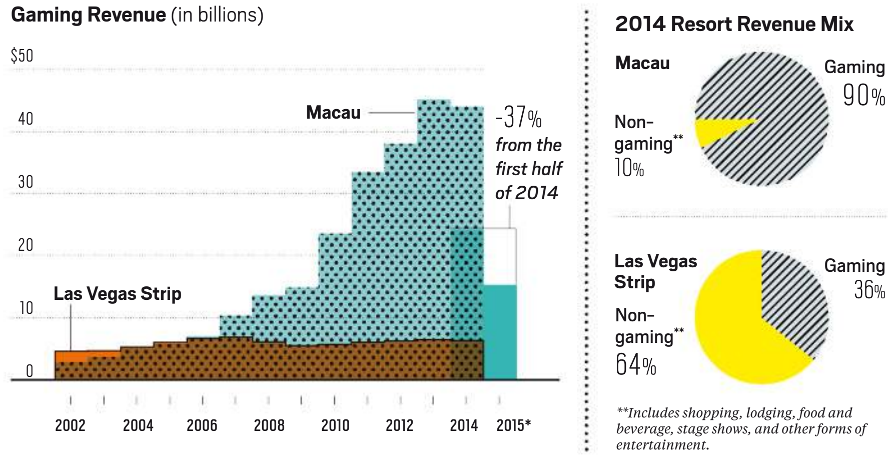
Hartford Funds Distributors, LLC.

23rd-richest individual. Wynn picked up Adelson's theme a few days later in his own teleconference. "Uncertainty," he said, "is the plaguing word of the day in Macau." Then Packer chimed in. Speaking about the corruption crackdown, he said in May, "When and how that ends, no one knows."

Amid this uncertainty, some investors glimpse opportunity. Mark Mobius, executive chairman of Templeton Emerging Markets Group, says the graft purge has benefited Macau. "Once they scrap the image of being a center for money laundering and other illicit activities, Macau will be transformed into an entertainment center like Las Vegas," says Mobius, who oversees $45 billion and declines to say whether he has been buying Macau-related shares. "The casinos have to move in that direction. They don't have a choice." A U.S. investor, David Winters, says his money is on Lui. "Our sense is that Galaxy will be the big winner when the clouds clear and the rain stops and the fear subsides," says Winters, who manages $1.5 billion, including Galaxy shares, at Wintergreen Advisers. "They have built a beautiful facility, have a lot of land bank, don't have any debt, and are ahead of the curve in providing what the government wants."

ROLL OF THE DICE

To grow, Macau casino operators plan to mimic Las Vegas by investing in nongaming entertainment.



*Through June 30. Sources: Bloomberg Intelligence, Macau Gaming Inspection and Coordination Bureau

In June, Galaxy's share of the Macau gaming market jumped 3.8 percentage points from a month earlier to 22.2 percent, narrowing the gap with market leader Sands China, which fell 3.8 percentage points to 22.7 percent. SJM had a market share of 22 percent; Melco Crown, 14.1 percent; MGM, 10.2 percent; and Wynn, 8.8 percent.

Francis Lui isn't bragging yet. He says the big test of his new property will come in October, when China has a weeklong National Day holiday and tourist arrivals traditionally reach their height.

Having made one winning bet on Galaxy, Stephen Monticelli, founder and president of Mosaic Investments, a former hedge fund that now manages Monticelli's own money, is betting the stock's price has fallen enough for him to have another wager. "I first bought the stock when it was trading at HK$2 and sold at between 8 and 14 dollars," Monticelli says. Since then, Monticelli has watched Galaxy shares soar to HK$83.20 in January 2014 and then plunge. When they hit HK$38, Monticelli bought back in again. "The Luis are either brilliant or fortunate," he says. "The rules in Macau are that Beijing makes the rules, and Galaxy fits exactly in with what Beijing wants Macau to become."

Not that Monticelli is ever entirely sure what Beijing's rules are. "Trying to understand Beijing is like trying to read tea leaves through frosted glass."

That's the biggest conundrum facing the casino companies: the Chinese government's attitude to Macau and the foreign companies that operate there. Grant Govertsen, a Macau-based analyst at Union Gaming Group, a Las Vegas investment bank, doesn't believe the anti-corruption crackdown was aimed specifically at Macau. "Macau was just collateral damage—but pretty significant collateral damage," he says.

Macau's former business model didn't

Galaxy casino personnel
ferry terminal await the arrival of guests.

impress Xi. In December, China's leader paid an official, two-day visit to Macau to celebrate the 15th anniversary of the peninsula's return to Chinese rule. On part of his trip, Xi stopped in at a People's Liberation Army firing range for some target practice. But more important, he also took aim at Macau's slavish dependence on Chinese gamblers, saying the city should diversify to position itself as a global tourism and leisure hub. "Certain deep-seated problems formed over the years have surfaced," Xi said, without mentioning the gaming industry directly.

He didn't need to. The Macau government promptly announced what it described as a "midterm review" of the six companies with gaming licenses whose 20-year concessions expire from 2020 to 2022.

While many analysts believe all the gaming licenses will be renewed, Hong Kong–based political and corporate risk consultant Steve Vickers isn't so sure. "It cannot be assumed as a given that all of the existing six concessionaires—especially the foreign ones—will retain their concessions, at least as currently structured," says Vickers, who's CEO of Steve Vickers & Associates. One possible outcome, he says, is that the government will award another concession to a Chinese company—making the competition even more cutthroat.

'WE ARE LIVING HERE IN MACAU IN ONE OF THE BIGGEST ECONOMIC CONSUMER EXPERIMENTS IN THE WORLD,' SAYS MGM'S GRANT BOWIE.

Barely a year ago, the casino companies' big bets on Macau would not have seemed very risky. Once a crumbling, crime-ridden colonial outpost where the only attempts at refinement were "no spitting" signs in the casinos, Macau transformed itself following its return to China in 1999. In 2001, Stanley Ho's monopoly ended, and the five other casino companies entered the fray.

All the newcomers had experience running casinos except the Luis, who had made their money through quarrying, construction, and slag before branching into hotels. Despite their lack of experience, Lui Che-woo had good connections in China. He had served on the Chinese People's Political Consultative Conference, a government advisory body, and had even had an asteroid named after him by Chinese scientists.

As new casinos opened, Macau embarked on a decade of explosive growth. In 2006, it overtook the Las Vegas Strip to become the world casino leader, with $7.1 billion in revenue. By 2013, that figure had increased to $45 billion—seven times that of the strip. Last year, Lui's two most important casinos, Galaxy and the smaller StarWorld, alone took in $9 billion, compared with combined revenue of just $6.4 billion for the 41 casinos on the Vegas strip. For at least part of its winning run, Macau was also the world's best-performing economy, surging 26.2 percent in 2010.

Then, late last year, Macau's fortunes equally spectacularly reversed direction. In addition to the corruption crackdown, the sharply slowing Chinese economy—down to 7 percent growth in the first quarter of 2015 from an average of 9.8 percent since 1978—deterred some visitors. And a Chinese stock market bubble provided unwelcome competition for punters who discovered they could get as many thrills from betting on roller-coastering Shanghai- and Shenzhen-listed equities as they could from traveling to Macau to play baccarat, blackjack, roulette, and the Chinese dice game *sic bo*. Gross domestic product in Macau shrank by 25 percent in the first three months of this year, making the world's biggest gaming hub the world's worst-performing economy.

Has Macau bottomed out? The territory does have some things going for it. Sometime within the next five years, a 36-kilometer-long (22-mile-long) bridge will span the Pearl River Delta to link Macau with Hong Kong. So instead of having to take an hourlong boat trip, visitors will be able to drive there. Most important, Hong Kong's airport, which handles 63 million passengers a year to Macau's 5.5 million, will essentially become Macau's local airport, a mere 30-minute drive away. "It's going to be a game changer for Macau," says Union Gaming's Govertsen.

Macau's history shows the gaming industry and the economy can change with lightning speed. Such was the case during the global financial crisis, when Galaxy's share price plunged 94 percent and the Las Vegas Sands teetered on the brink of bankruptcy before swiftly rebounding. Govertsen says he's advising clients that the current descent may be bottoming and they should stay in the market. "When the recovery comes, it will be pretty sharp," he says. "And the risk of continuing to be negative on Macau is that you could miss a lot of it."

Back at the Galaxy casino, Francis Lui has no doubt—suggesting he's more of a gambling man than he lets on. Asked to pose for a photograph holding a king of spades, he discards the card instantly in favor of one of the four in the deck that has a higher value. "We're going to ace it," he says. BM

With assistance from **Edward Robinson**.

BLOOMBERG TIPS

Comparing Casinos

You can use the Bloomberg Intelligence dashboard on casinos and gaming to track the market share of companies operating in Macau. Type **BI GAMEG <Go>** on the Bloomberg Professional service and click on Market Share under Data Library on the left side of the screen. Click on Casino Rev. Mkt Shr % for a table showing the percentage of Macau casino revenue taken in by various companies over time. To see how the sources of Galaxy's gaming revenue have evolved, with mass-market gaming picking up share from VIP gaming, click on the pie chart icon to the right of Galaxy Entertainment. Click on the upside-down triangle to display different years starting with 2009.

JON ASMUNDSSON

THE SCANDAL THAT ATE MALAYSIA

THE NEAR COLLAPSE OF A STATE-OWNED COMPANY HAS ROCKED THE GOVERNMENT, RATTLED INVESTORS, AND STIRRED PUBLIC OUTRAGE.

BY YOOLIM LEE AND ELFFIE CHEW

PHOTO ILLUSTRATION BY DAMIEN VIGNAUX


JHO LOW
SHAHROL HALMI
NAJIB RAZAK
RIZA AZIZ
KIMORA LEE SIMMONS AND TIM LEISSNER
ROSMAH MANSOR
MAHATHIR MOHAMAD
ARUL KANDA
KHADEM AL QUBAISI
PATRICK MAHONY

In the spring of 2013, Song Dal Sun, head of securities investment at Seoul-based Hanwha Life Insurance, sat down to a presentation by a Goldman Sachs banker. The young Goldman salesman, who had flown in from Hong Kong, made a pitch for bonds to be issued by 1Malaysia Development Bhd., a state-owned company closely tied to Malaysian Prime Minister Najib Razak.

It was enticing. The 10-year, dollar-denominated bonds offered an interest rate of 4.4 percent, about 100 basis points higher than other A-minus-rated bonds were yielding at the time, he recalls. But Song, a veteran of 25 years in finance, sensed something was amiss. With such an attractive yield, 1MDB could easily sell the notes directly to institutional investors through a global offering. Instead, Goldman Sachs was privately selling 1MDB notes worth $3 billion backed by the Malaysian government. "Does it mean 'explicit guarantee'?" he recalls asking the Goldman salesman, whom he declined to name. "I didn't get a straight answer," Song says. "I decided not to buy them."

The bond sale that Song passed up is part of a scandal that has all but sunk 1MDB, rattled investors, and set back Malaysia's quest to become a developed nation. Najib, who also serves as Malaysia's finance minister, sits on 1MDB's advisory board as chairman. The scandal's aftershocks have rocked his office, his government, and the political party he leads, United Malays National Organisation, or UMNO. A state investment company trumpeted as a cornerstone of Najib's economic policy after he became prime minister in April 2009, 1MDB is now mired in debts of at least $11 billion. Former Prime Minister Mahathir Mohamad, a one-time political mentor who's turned on Najib, says "vast amounts of money" have "disappeared" from 1MDB funds. 1MDB has denied the claim and said all of its debts are accounted for. The prime minister's office declined to comment for this article.

From the moment in 2009 when Najib took over a sovereign wealth fund set up by the Malaysian state of oil-rich Terengganu and turned it into a development fund owned by the federal government, 1MDB has been controversial. Since the beginning of this year—with coverage driven by the *Sarawak Report*, a blog, and *The Edge*, a local business weekly—the scandal has moved closer and closer to the heart of government, sparking calls for Najib's ouster and recalling Malaysia's long struggle with corruption and economic disappointment.

Mahathir, who was prime minister from 1981 to 2003, now accuses Najib of "hijacking" the Terengganu Investment Authority, or the TIA, from the state government. Not so, 1MDB said in a statement: The state government willingly "decided to withdraw from the TIA" after the federal government guaranteed the TIA's bonds.

That didn't end the argument. Beginning in March, as public pressure grew, the country's auditor general, the parliament's public accounts committee, the central bank, and the police have all homed in on 1MDB. The force of the scandal helped topple the ringgit, the worst-performing currency in Asia as of July 16, down 8.1 percent against the dollar since the start of the year. Foreign reserves plunged 20 percent in June from a year earlier.

On July 3, the *Wall Street Journal*, citing documents from government authorities, reported that investigators believe almost $700 million in cash moved through state agencies, banks, and companies linked to 1MDB before eventually finding its way into Najib's personal accounts. The money reportedly included two transactions—one worth $620 million; another, $61 million—made in March 2013, two months before a general election returned Najib to power as part of the Barisan Nasional, or National Front, coalition.

In a country with no public campaign financing and few strictures on political donations, the alleged cash flows caused alarm. Before the 2013 election, on March 12, 1MDB Chairman Lodin Wok Kamaruddin and Khadem Al Qubaisi, then chairman of Abu Dhabi's Aabar Investments, signed

Police raid 1MDB's offices in Kuala Lumpur on July 8, seizing computers and other equipment.

PREVIOUS SPREAD: LOW: KEVIN MAZUR/WIREIMAGE; HALMI: GOH SENG CHONG/BLOOMBERG; RAZAK: WANG YE/XINHUA/REDUX; AZIZ: J. EMILIO FLORES/*THE NEW YORK TIMES*/REDUX; LEISSNER: ARAYA DIAZ/GETTY IMAGES FOR THE WEINSTEIN; MANSOR: BAGUS INDAHONO/EPA/CORBIS; MOHAMAD: GOH SENG CHONG/BLOOMBERG; KANDA: 1MDB; QUBAISI: GARETH CATTERMOLE/GETTY IMAGES FOR LAUREUS; MAHONY: ALO CEBALLOS/GC IMAGES/GETTY; THIS PAGE: MOHD RASFAN/AFP/GETTY IMAGES

Najib's stepson, **Riza Aziz**, far left, joins **Leonardo DiCaprio** and others at the London premiere of *The Wolf of Wall Street* on Jan. 9, 2014.

PAUL HACKETT/REUTERS/LANDOV

an agreement to form a joint venture. The following month, 1MDB announced it had raised $3 billion for its share of the partnership. "1MDB opted for a private placement to ensure the timely completion of this economic initiative," the company said in a statement on April 15 of that year.

The timing was controversial. "1MDB may have been created with one of the key objectives being to raise a slush fund to finance Barisan Nasional's election campaigns," says MP Tony Pua, of the opposition Democratic Action Party. A statement from the prime minister's office dismissed the allegations in the *Wall Street Journal*, saying they amounted to "political sabotage" at the hands of "certain individuals to undermine confidence in our economy, tarnish the government, and remove a democratically elected prime minister." In a statement, 1MDB said it "has never provided any funds to the prime minister."

Malaysia's biggest-ever financial scandal has spotlighted a colorful cast of characters—some connected to 1MDB, some not. A politician since the age of 23, the mustachioed Najib is the eldest son of the country's second prime minister following its independence from Britain in 1957, Abdul Razak Hussein, and a nephew of the third, Hussein Onn.

Najib's wife, Rosmah Mansor, is an influential figure in her own right. A former executive at Island & Peninsular, a real estate company, she's often lampooned in the local media for her bouffant hairstyle and penchant for luxury.

Riza Aziz, Rosmah's son from her first marriage, is close to a Kuala Lumpur man about town who's been linked to 1MDB named Low Taek Jho. Jho Low, as he's known, is a whiz-kid dealmaker who exploded onto the gossip pages in 2009. One photo shows the moon-faced Low partying with California socialite Paris Hilton and clutching a bottle of Cristal champagne. The prime minister's stepson co-founded a Los Angeles company that produced *The Wolf of Wall Street*, the 2013 film about lifestyle excesses and criminal exploits in the world of finance; Low got a full-screen "special thanks" credit at the end of *Wolf*. Low helped set up 1MDB's first joint venture, with PetroSaudi International, according to reports in *The Edge* and the *Sarawak Report*.

An additional touch of glamour comes from Goldman Sachs executive Tim Leissner, a lanky, blue-eyed German who's married to former U.S. fashion model and designer Kimora Lee Simmons, the ex-wife of Russell Simmons, co-founder of New York hip-hop music label Def Jam Recordings. In September 2013, when Najib and Rosmah traveled to San Francisco to open a new office of Khazanah Nasional, Malaysia's sovereign wealth fund, Rosmah and Simmons were photographed together. Leissner, now Goldman's Southeast Asia chairman, was a fixture in Malaysian dealmaking in the late 2000s. Goldman helped manage billionaire T. Ananda Krishnan's 2009 initial public offering of Maxis, Malaysia's biggest mobile phone service provider.

'WHO APPROVED SUCH TERRIBLE TERMS FOR A LOAN TO A GOVERNMENT-OWNED COMPANY?' ASKED FORMER PRIME MINISTER MAHATHIR MOHAMAD, A ONE-TIME POLITICAL MENTOR WHO'S TURNED ON NAJIB.

Goldman established a close and profitable relationship with 1MDB. From 2012 to 2013, Goldman arranged three bond sales for the company, totaling $6.5 billion. Fees, commissions, and expenses for Goldman totaled $593 million—about 9.1 percent of the money raised—according to a person familiar with the sales. "These transactions were individually tailored financing solutions, the fee and commissions for which reflected the underwriting risks assumed by Goldman Sachs on each series of bonds, as well as other prevailing conditions at the time, including spreads of credit benchmarks, hedging costs, and general market conditions," says Hong Kong–based Goldman spokesman Edward Naylor.

In 2013, Goldman arranged 1MDB's $3 billion bond sale, the one passed up by Hanwha Life's Song. The note is included in JPMorgan's benchmark Asian and Emerging-Market Bond indexes. Goldman's commissions, fees, and expenses from the sale were $283 million, or 9.4 percent of the amount raised, according to the prospectus. The person familiar with the transaction says Goldman's take was high because the bank bought bonds from 1MDB, assuming the risk, and then resold them to customers.

In many ways, 1MDB's star-crossed existence mirrors the misfortunes of this country of 30 million people. Najib set up 1MDB at a time when the Malaysian economy was on the mend; it expanded by 7.4 percent in 2010, becoming one of the fastest growing in Southeast Asia. The company—supported by the advisory board chaired by Najib and including high-ranking government officials from China, Saudi Arabia, and the United Arab Emirates—set out to be a state-owned strategic development company that would forge global partnerships, draw foreign investment to Malaysia, and build up the country's industrial base.

Early on, 1MDB formed joint ventures with Saudi and Abu Dhabi companies. On a visit to Malaysia in July 2013, Japanese Prime Minister Shinzo Abe attended a signing ceremony that was meant to initiate discussions on 1MDB's plan to issue Samurai bonds guaranteed by the Japan Bank for International Cooperation. None of these plans panned out as they were supposed to. Over time, to its growing number of detractors, 1MDB looked more and more like a giant black box, its inner workings echoing the mysteries suggested by the *wayang kulit*, traditional shadow puppets, that frolic on the office walls of the Kuala Lumpur–based company.

1MDB, which has announced plans to wind itself down, is reducing its debt,

COUNTDOWN TO CHAOS

AS DEBT ENGULFED 1MDB, THE ENSUING SCANDAL TORE THROUGH A WHO'S WHO OF MALAYSIAN SOCIETY.

December 2008
Terengganu state gets federal government approval to set up the Terengganu Investment Authority as a sovereign wealth fund.

April 2009
Najib Razak becomes prime minister.

May 2009
TIA sells its first ringgit bonds, amounting to the equivalent of $1.3 billion. They're guaranteed by the federal government.

July 2009
The federal government takes over the TIA and renames it 1Malaysia Development Bhd.

September 2009
1MDB sets up a $2.5 billion joint venture with PetroSaudi International.

December 2009
Goldman Sachs wins approval from the Securities Commission of Malaysia to set up fund management and corporate finance advisory operations in the country.

March 7, 2012
1MDB acquires Tanjong Energy Holdings from Malaysian billionaire T. Ananda Krishnan for $2.2 billion.

May 21, 2012
1MDB raises $1.75 billion by selling 10-year notes yielding 5.99 percent.

July 2012
Najib inaugurates 1MDB's Tun Razak Exchange, a financial center, on 70 acres of prime Kuala Lumpur real estate.

August 2012
1MDB agrees to buy Genting's domestic power-generation assets for $605 million.

October 2012
1MDB raises $1.75 billion by selling 10-year bonds yielding 5.75 percent.

March 19, 2013
1MDB raises $3 billion by selling 10-year bonds yielding 4.4 percent.

March 25, 2013
1MDB appoints Mohd Hazem Abd Rahman as CEO, replacing Shahrol Halmi.

May 2013
The ruling Barisan Nasional coalition wins the election. Najib begins a second term.

September 2013
Najib and his wife, Rosmah Mansor, travel to San Francisco to open Khazanah Nasional's new office. Among the guests are Goldman's Tim Leissner, below, and Kimora Lee Simmons.

Nov. 6, 2014
1MDB reports financial results for the year ended on March 31, 2014, during which debt surged 16 percent, to $11 billion.

January 2015
1MDB appoints Arul Kanda as president and executive director, replacing Mohd Hazem, who steps down as CEO.

February 2015
1MDB settles a $526 million bank loan with money from billionaire Krishnan after reportedly missing two repayment deadlines and getting at least one extension.

March 4, 2015
Najib instructs the country's auditor general to independently verify the financial accounts of 1MDB—the first of four investigations into the company.

March 12, 2015
1MDB gets $250 million in standby credit from the Ministry of Finance.

May 2015
Abu Dhabi–based International Petroleum Investment and its Aabar Investments unit agree to provide $1 billion to 1MDB so it can pay off $975 million of a Deutsche Bank–led syndicated loan.

June 5, 2015
Police cut short a speech by former Prime Minister Mahathir Mohamad, right, at a public forum on 1MDB. They end the event, and Najib does not attend.

June 24, 2015
Home Minister Ahmad Zahid Hamidi, who has the power to rescind publishing permits, says news outlets may have published information on 1MDB that had been tampered with.

July 3, 2015
Almost $700 million in cash linked to 1MDB landed in Najib's bank accounts, the *Wall Street Journal* reports. Najib says he never took funds for personal gain and threatens to sue the paper.

July 14, 2015
A preliminary report by the auditor general finds no evidence of wrongdoing by 1MDB or proof that $700 million went to a "certain individual," says Ahmad Husni Hanadzlah, Malaysia's second finance minister.

LEFT TO RIGHT: NIGNY/SPLASH NEWS/CORBIS; EUGENE HOSHIKO/AP

Sotheby's
INTERNATIONAL REALTY

UNIQUE IMPRESSIONS WORLDWIDE **SIR.COM**

GUANA CAY, ABACO, BAHAMAS

Gumelemi Cay. Private island, 8 acres with 3 private beaches part of the Baker's Bay Golf & Ocean Club community. Just a 1 minute boat ride to golf, fine dining and more. WEB: 25EWS7. **$17,900,000 US**. George.Damianos@SothebysRealty.com

Damianos Sotheby's International Realty
+1 242.424.9699 | SIRBahamas.com

PARADISE ISLAND, BAHAMAS

Ocean Club Estates. Opulent 13,000 sf, 6 BR, 6 bath home on 136' sandy beachfront. Guest cottage, indoor fitness pool and beachfront pool. Resort amenities and marina. WEB: RBDMG5. Price upon request. Ridley.Carroll@SothebysRealty.com

Damianos Sotheby's International Realty
+1 242.424.5801 | SIRbahamas.com

PARADISE VALLEY, AZ

Blends old world elegance with inspiring contemporary flair. Dedicated wing with 3 en suite BR & den/5th BR. Heated pool & spa, majestic mountain views, northern exposure backyard, trophy garage on a privately gated acre lot. **$4,200,000**. Frank Aazami.

Russ Lyon Sotheby's International Realty
+1 480.266.0240 | ChicChicagoVibe.com

SCOTTSDALE, AZ

Presenting Oasis Ranch, equestrian luxury living. 12 glorious acres framed by the majesty of private Palm Grove that enjoys the most spectacular views of Pinnacle Peak and city lights. Stunning residence with guest house. **$6,000,000**. Frank Aazami.

Russ Lyon Sotheby's International Realty
+1 480.266.0240 | ScottsdaleOasisRanch.com

DEL MAR, CA

Elegant estate with endless views of the Pacific Ocean! This custom built home feels like a private 5-star resort with 4 ensuite BR, 2 detached guest quarters, theatre, impeccable finishes, incredible pool and lush landscaping. **$7,495,000**. Corinne St. John.

Pacific Sotheby's International Realty
+1 858.259.8300 | pacificsothebysrealty.com

SONOMA, CA

Approximately 140 acre ranch, 11,800 sf home with 6 BR, lake, beach, softball diamond, tennis court, gardens, pool, manager's building. 15 mins to Sonoma Plaza. 60 mins to San Francisco. WEB: 0243305. Price upon request. Donald Van de Mark.

Sotheby's International Realty Wine Country Brokerage
+1 707.337.2227 | SonomaRanchEstate.com

FLORIDA KEYS, FL

Private oceanfront estate cloistered on 1.5 acres featuring 4 BR, 3 baths, swimming pool, sandy backyard retreat, concrete seawall, and 400' pier with boat lifts and fish cleaning station. **$4,000,000**. Sarah.Ewald@sothebysrealty.com

Ocean Sotheby's International Realty
+1 305.712.8888 | OceanSIR.com

EAST HAMPTON, NY

Estate Section, historic Manor, exquisite 6.7 acre hilltop estate. 1891 period details. Robert A.M. Stern renovated 5 BR, 4 baths, 6 fireplaces, heated pool, guest cottage, tennis. WEB: 0046718. **$19,900,000**. Rebekah Baker and James Petrie.

Sotheby's International Realty East Hampton Brokerage
+1 631.907.8468/8469 | sothebyshomes.com/hamptons

NEW YORK, NY

The exceptionally grand and beautiful 1009 Fifth Avenue was constructed in the Beaux-Arts style & regarded as an architectural tour de force. WEB: 0019150. **$80,000,000**. Serena Boardman.

Sotheby's International Realty
East Side Manhattan Brokerage
+1 212.606.7611 | sothebyshomes.com/nyc

NEW YORK, NY

Recently & impeccably renovated, this immense 14 into 12 room duplex incorporates custom modern finishes within a traditional vernacular. WEB: 0019601. **$37,500,000**. Serena Boardman.

Sotheby's International Realty
East Side Manhattan Brokerage
+1 212.606.7611 | sothebyshomes.com/nyc

NORTHEAST WASHINGTON STATE

A retreat sited upon 900 acres. A 150 acre private lake reflects a 12,000 sf log home, adjacent 8,000 sf spa pavilion and pool house. Includes recreational and maintenance vehicles. Helipad with FBO airports nearby. **$11,000,000**. Michael X. Ford.

Realogics Sotheby's International Realty
+1 206.448.5752 | BuckQuarterRanch.com

JACKSON HOLE, WY

This stunning 72 acre property with substantial improvements has two enhanced creeks, Snake River frontage, Teton views, a 10 BR home, a 6 BR guest home, an observatory and more. **$22,000,000**. Dave Spackman and Tom Evans.

Jackson Hole Sotheby's International Realty
+1 307.739.8132 / 307.739.8149 | BarBBarRanch.com

TYPE SIRA <GO>

‘1MDB MAY HAVE BEEN CREATED WITH ONE OF THE KEY OBJECTIVES BEING TO RAISE A SLUSH FUND TO FINANCE BARISAN NASIONAL’S ELECTION CAMPAIGNS,’ SAYS MP TONY PUA, OF THE OPPOSITION DEMOCRATIC ACTION PARTY.

according to President Arul Kanda. “1MDB has undertaken various initiatives to reduce the company’s debt levels and ensure that maximum value is generated for its 100 percent shareholder, the Ministry of Finance,” Kanda said in a statement to *Bloomberg Markets* on July 16. As part of the plan, 1MDB has repaid a $975 million loan, while more than 40 potential investors have shown interest in one of its property developments, Bandar Malaysia. He said the company also intends to sell its power plants. “We are focused and are making good progress,” he said.

The 1MDB story begins in 2008. In December of that year, Terengganu, a sultanate located across the Malay Peninsula from Kuala Lumpur, got federal government approval to set up its sovereign wealth fund, the TIA. Goldman Sachs and Boston Consulting Group advised the TIA in its early days. Jho Low advised the TIA from January to mid-May, according to a statement released on his behalf to local media in May 2014.

In May 2009, the TIA raised 5 billion ringgit ($1.3 billion) through the sale of 30-year Islamic bonds. Guaranteed by the federal government, they were offered at an interest rate of 5.75 percent. In fact, according to Mahathir, the bonds were sold at a discounted price that effectively yielded bondholders 7 percent. “Who approved such terrible terms for a loan to a government-owned company?” the former prime minister asked on his blog. 1MDB said in response that the effective yield was actually 6.15 percent and was reasonable considering that these were Malaysia’s first 30-year notes.

Two months later, the Najib government quietly took over the TIA and renamed it 1MDB. As the new company was getting up and running, the well-connected Low laid the groundwork for 1MDB’s dealings with the Saudis, according to reports in *The Edge* and the *Sarawak Report*. The son of a wealthy Malaysian businessman, Larry Low, Jho studied at Harrow, an elite London boarding school. While there, he met Najib’s stepson, Riza Aziz, who was studying at the London School of Economics and Political Science, and came to know Riza’s mother, Rosmah, when she visited London, according to a *New York Times* report in February. Later, at the Wharton School at the University of Pennsylvania, he took a semester off to start a company called Wynton Group, managing $25 million pooled mostly from his friends’ families, according to an interview he gave to Malaysia’s *Star* newspaper in 2010.

In a similar vein, Low’s role at 1MDB involved “OPM”—other people’s money, says a former business associate in Kuala Lumpur. By now, Low had assembled an impressive array of connections. On Sept. 7, 2009, Low met Patrick Mahony, an executive of PetroSaudi International, in New York, according to a report in *The Edge*. Tarek Obaid, a co-founder of PetroSaudi, had introduced them to each other via e-mail on Aug. 28, the report said. It didn’t take long for 1MDB and PetroSaudi to cobble together a $2.5 billion joint venture. Mahony didn’t respond to e-mailed questions. Obaid couldn’t be reached for comment.

As it got off the ground, 1MDB worked with more than a dozen financial institutions, but it forged especially close ties with Goldman. A helping hand came from Roger Ng, Goldman’s head of Southeast Asia sales and fixed-income trading, a Malaysian national well-known for his connections to politicians and tycoons, according to two people who know him. Leissner, then based in Singapore as Goldman’s co-president for Southeast Asia, played a key role in expanding the bank’s business in Malaysia. He declined to comment for this article. Ng, who left Goldman last year, didn’t respond to phone calls or a text message.

In December 2009, Goldman won a license from Malaysia’s Securities Commission to set up fund management and corporate finance advisory operations in the country. “The future outlook for Malaysia’s capital markets and its asset management industry is very positive,” Leissner said in a statement released by the commission at the time. “Through our local presence, we look forward to playing a larger role in their development.”

For 1MDB, Goldman played multiple roles. In 2012, it advised the firm on its acquisition of Tanjong Energy Holdings from Malaysian billionaire Krishnan and domestic power plants from Genting, a conglomerate. The following year, the bank helped 1MDB purchase the Jimah Energy Ventures power plant in Selangor, Malaysia, a deal that was completed in 2014.

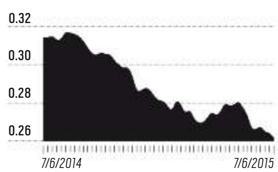
The true extent of the trouble at 1MDB didn’t become apparent until late last year. Scandal aside, 2014 was a difficult year for Najib and his government. First came the disappearance of Malaysia Airlines Flight 370 and all 239 people on board in March. Then, in July, Flight 17, also operated by the state-owned airline, crashed near Donetsk in strife-torn eastern Ukraine, possibly after being hit by a surface-to-air missile; all 298 passengers and crew died. It was around that time that the *Sarawak Report* and *The Edge*, under longtime editor Ho Kay Tat, began their exposés of 1MDB, adding to Najib’s woes.

The *Sarawak Report* was founded by Clare Rewcastle Brown, who was born

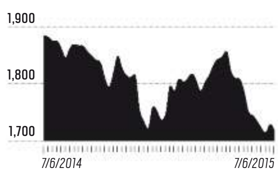
Hard Times

A slumping currency and battered stocks on the Kuala Lumpur exchange have added to Prime Minister Najib’s troubles.

Ringgit (in U.S. dollars)



FTSE Bursa Malaysia KLCI Index



Source: Bloomberg

in Sarawak, a state on the island of Borneo, of British parents and now runs the site out of London. (Her husband, Andrew Brown, who recently retired as the head of media relations at EDF Energy, is the brother of former U.K. Prime Minister Gordon Brown.) Earlier this year, the website claimed to have obtained e-mails and other documentation showing how Jho Low and several business associates siphoned $700 million from 1MDB's PetroSaudi venture, which was registered in the Cayman Islands in the Caribbean. Low, who has denied playing any role in 1MDB after the work he did for the TIA, didn't respond to requests for an interview or to e-mailed questions. The government, without giving any details, has tried to discredit the e-mails as reported by the *Sarawak Report*, saying the communications may have been tampered with.

In an unprecedented crackdown, Malaysian authorities this year have arrested more than 150 journalists, activists, opposition politicians, and lawyers on sedition charges or under a peaceful assembly act that strictly regulates public protests. One of Malaysia's best-known political cartoonists, who goes by the name Zunar, has been charged with nine counts of sedition and faces up to 43 years in prison.

On June 22, Thai police arrested a tattooed Swiss national named Xavier Justo, a former executive at 1MDB investment partner PetroSaudi International, on the resort island of Koh Samui. Police said they suspected Justo of trying to extort money from PetroSaudi and leaking e-mails about the oil company's dealings with 1MDB. Justo denied the allegations, the *Bangkok Post* reported.

Adding to a climate of fear and tension, the Malaysian police launched an investigation into whether government officials, including central bank personnel, were behind the leaking of documents that allegedly showed 1MDB money turning up in Najib's accounts. The central bank on July 12 denied any impropriety.

As allegations swirl around him, the stakes for Najib are high. Not only is he prime minister and finance minister; he's also president of a political machine, UMNO, that has been in power since Malaysia's independence. What's more, he's chairman of the Khazanah Nasional sovereign wealth fund, which had $29 billion under management at the end of 2014. "Power is too concentrated to one person," says Zaid Ibrahim, a former law minister who built the country's largest law firm. He says the total lack of checks and balances in Malaysia has led to abuse of power.

In the early days of Najib's rule, Malaysians had more cause for optimism than now, says Danny Quah, an economics professor at the LSE. Like many successful Malaysians overseas, Quah has maintained ties with his native country. He served on Malaysia's National Economic Advisory Council from 2009 to 2011, and he still vividly recalls a day—March 30, 2010—when Najib stood in front of global investors and promised a "1Malaysia" where all Malaysians of different races would work together toward one goal—turning Malaysia into a developed nation by 2020. At the time, Najib had enough popular support to aim high. "Right then, it was a golden opportunity," Quah says. "It's a moment that passed."

Mahathir, 90, shows no signs of letting his erstwhile protégé off the hook. After a poor showing by UMNO in the March 2008 elections, Prime Minister Abdullah Ahmad Badawi stepped down the following year and was replaced by his deputy prime minister, Najib. Over time, Mahathir said later, he became disillusioned with Najib's management of the economy. He said he expressed his doubts first privately and then publicly.

With the 1MDB scandal gaining momentum, outright war broke out between Mahathir and Najib. Najib, Mahathir said in June, had crossed the line. "1MDB is the straw that broke the camel's back," said Mahathir, who has repeatedly called for Najib to resign. Najib, who says he won't step down, lashed back at Mahathir, known by the honorific Tun. "The 'mess' that Tun refers to is largely of his own making as a result of his attacks and his echoing of opposition lies and slander," Najib wrote on his website.

As words flew between Mahathir and Najib in June, the Malaysian Volunteer Lawyers Association organized a forum to hear from Najib on 1MDB. It was called Nothing2Hide. Mahathir saw a chance to speak his mind about 1MBD and the money he said was missing. "I feel obligated to explain to the people what really happened and why I've decided not to support Najib any longer," he said to the gathering. "This is not about me or Najib. It's about the whole nation because what was lost belonged to all of us. I am just a spokesperson. Many people have come to me, asking me to do something."

About 10 minutes into Mahathir's speech, uniformed police moved in and stopped the aging but still spry former prime minister from speaking. Whatever Najib thought of the action taken against his mentor-turned-rival may never be known. Amid police concerns about "public order and national harmony," he didn't show up. BM

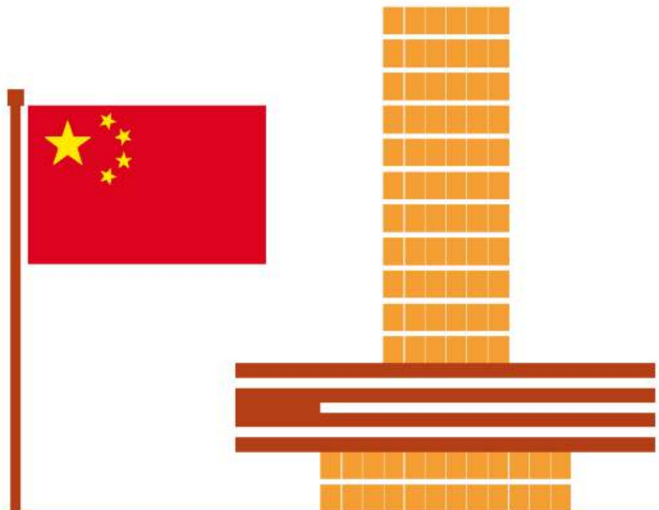
'POWER IS TOO CONCENTRATED TO ONE PERSON,' ZAID IBRAHIM, A FORMER LAW MINISTER WHO BUILT MALAYSIA'S LARGEST LEGAL FIRM, SAYS OF NAJIB, WHO SERVES AS BOTH PRIME MINISTER AND FINANCE MINISTER.

BLOOMBERG TIPS

Following the 1MDB Tale

You can use the News Search (NSE) function to set an alert that will notify you when news stories or social media postings related to 1MDB appear. To do so, type **NSE <Go>** on the Bloomberg Professional service. Enter *1MDB* in the field and click on the Exact Match item in the list of results. To specify that you want to see stories from all available sources, click on the Sources button on the red tool bar. In the Edit Sources window, click on the circle to the left of Other. Click on the circle to the left of All Sources and then on the Done button. Click on the Display & Edit button and select Set Alert Delivery. Specify how you want the alert to be delivered and click on Done.

JON ASMUNDSSON



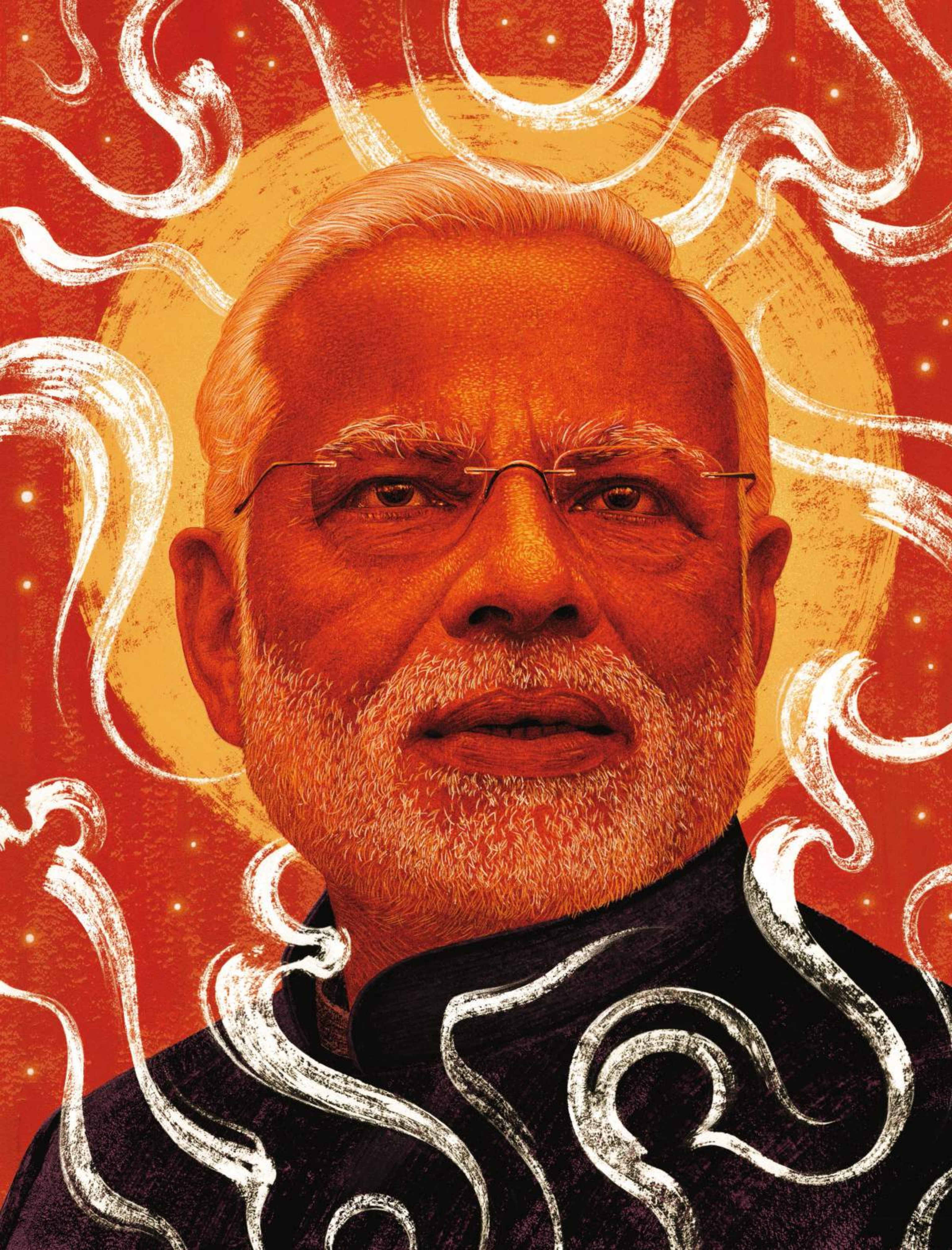
BY
TOM
LASSETER

AND
KARTIKAY
MEHROTRA

A MAN APART

ASSESSING **NARENDRA MODI'S** ENORMOUS AMBITIONS, FOR INDIA AND HIMSELF

ILLUSTRATION BY BORIS PELCER



The prime minister, in the suit all of India was talking about, welcomes Barack Obama to the country.

ON the evening of Feb. 17, a white sedan pulled up to Shastri Bhawan, a drab brick-and-concrete government building in central New Delhi, and parked at the front gate.

As with most edifices of bureaucracy in India, the streets outside of Shastri Bhawan, named for India's second prime minister, are a jumble of activity during the day: people shuffling by with documents in their hands as shoeshine men wait for business, auto rickshaws honking their way through traffic, snack vendors tending pans of frying lentils.

But at 9 p.m., with a sliver of a moon overhead, the tree-lined boulevards were quiet. Two men climbed out of the car—brothers who'd formerly worked in the building in positions with the official title of "multitasking staff," a lowly position often referred to as "peon" in India's stratified bureaucracy.

Lalta Prasad, 36, and Rakesh Kumar, 30, were jobless men who both left school after the 10th grade. With fake government passes in hand, the pair strolled in like they owned the place, went upstairs to the Ministry of Petroleum and Natural Gas, and began photocopying piles of documents, according to police reports.

Emerging two hours later with their illicit haul, they walked into the waiting arms of the cops. Prasad had a black bag slung over his right shoulder; inside was a stack of 95 pages ranging from a brief on "Further Opportunities in Sri Lanka" to assorted documents from the ministry's Exploration Division. Kumar carried 109 pages, among them 38 ministry pages marked secret and two more about the national gas grid that were meant for the finance minister's national budget speech.

The theft, leaking, and sale of classified government files to corporations looking for a leg up on competitors has for decades been a staple of Indian corruption. Behind the dense formality of Indian bureaucratic speak and the infamous love of paperwork, government offices are often disheveled spaces with little accountability, manned by officials with a reputation for supplementing low incomes with bribes. That former peons would be distributing secret documents was not surprising.

"We all feigned shock, but that is how it goes," says Mohan Guruswamy, who served as a senior Finance Ministry official in the late 1990s and now runs a policy research center. "Everybody knows that it's happening all the time. It's not something new."

Under the government of Prime Minister Narendra Modi, though, the landscape is changing.

Modi, if you believe his critics, swept to office as a rabid nationalist with a deep authoritarian streak. He was further, they said, a loyal agent of business interests whose history suggested he would pander to CEOs, selling out the nation's welfare in the name of streamlining regulation and cutting red tape.

Instead, Modi has shown signs of encouraging the government to check the influence of the corporate world. It's clear that he expects business to play a role in the nation's growth. It's also clear that, driven by a strong sense of his own political destiny, he expects India Inc. to know its place.

Rather than looking the other way after a break-in was discovered late last year, ministry officials contacted the New Delhi police and asked for an investigation. That eventually led to a stakeout at Shastri Bhawan and the arrest of Prasad and Kumar. The police didn't stop at the former peons; at least 13 people, including executives at seven companies, were charged with taking part in a criminal conspiracy built on the theft of official documents.

The headline grabber was Shailesh

PRABHAT KUMAR VERMA/PACIFIC PRESS/LIGHTROCKET/GETTY IMAGES

Saxena, 45, a manager of corporate affairs at Reliance Industries, which is among India's largest companies. It is run by Mukesh Ambani, India's richest man. Saxena, according to New Delhi court documents filed by police, was one of the people who funded the break-ins, a charge he denied through his attorney in court documents. The brothers' lawyer would not comment when reached by phone.

As Modi moves into his second year in office, he has certainly shown pro-business instincts. On trips to capitals around the world, he has trumpeted Make in India, a program seeking to jump-start manufacturing through tax incentives and higher limits for direct foreign investment across many sectors.

He's directed and cajoled ministries and state governments to speed clearances of licenses for projects—efforts that haven't been uniformly successful but that businessmen say have helped. Modi last year told bureaucrats that each department should repeal at least 10 of its rules that are obviously redundant, reduce the number of decision-making levels, and slash forms to one page, according to a letter sent out by Cabinet Secretary Pradeep Kumar Sinha.

Modi has also pushed, to the applause of business leaders, a bill making it easier to use eminent domain to seize land for development projects. The measure has yet to pass parliament, though Modi has used executive powers to temporarily ease land-acquisition rules.

At the same time, however, Modi backed legislation that cracks down on wealthy Indians and companies hiding assets overseas, known as "black money," with fines and prison for tax evaders and those who abet them. The bill became law in May.

Even more disruptive to the Indian way of doing business, executives in New Delhi and Mumbai say, he's shut off much of the personal access for industrial titans to the prime minister's office. The *Economic Times,* India's largest financial newspaper, came to a similar conclusion. It reported in May, after interviewing more than 20 high-ranking executives, bureaucrats, and politicians about Modi, that "big business says access to the upper echelons of government has declined in dramatic fashion."

A small, but telling, detail: Modi's government last year cut down on memberships for bureaucrats at the Delhi Golf Club, suggesting their place was in the office, not hobnobbing with the rich.

It's an approach to the corporate elite in India that's been more nuanced than many expected; a balancing act that's probably confused his friends and enemies alike.

Modi's father made a living selling tea on a train station platform in the state of Gujarat. At the age of 17, Modi burned family photographs and renounced worldly goods before abandoning his teenage bride—the marriage had been arranged—to set off for the Himalayas.

One of Modi's brothers says he remembers their mother dabbing vermilion on Narendra's forehead and handing over a package of sweets before he left the house. "It is natural that there would be some agony, but the other aspect also is that Narendra *bhai*"—a term meaning *brother*—"left the home to do something meaningful," says Prahalad Modi, who now runs a tire shop in Ahmedabad, the largest city in Gujarat.

Modi appears in hologram form during his 2014 campaign.

INDRANIL MUKHERJEE/AFP/GETTY IMAGES

Narendra Modi, a young man who lived in a house without electricity and borrowed neighbors' irons to keep his school clothes sharply creased, was leaving to study Hinduism. He returned between two and four years later—accounts vary—and then in his early 20s began a lifelong relationship with the Rashtriya Swayamsevak Sangh, a hard-line Hindu nationalist organization.

Modi's introduction to politics in the 1970s was as a volunteer who cleaned floors, fetched milk, and washed the clothes of his seniors at a Gujarat office of the RSS. The organization is controversial. Its supporters say it's a patriotic force working for the betterment of the nation. Its detractors accuse it of stoking religious conflict, and even of fascist tendencies. The group has been banned three times since Indian independence, including during the Emergency, a suspension of democracy by Prime Minister Indira Gandhi from 1975 to 1977. Modi was an underground activist during that time, traveling in disguises that included a Sikh turban.

As he worked his way up the RSS ladder, he gained a reputation for being dedicated, completely, to the organization. After an RSS-backed political coalition fell apart at the end of the 1970s, it formed the Bharatiya Janata Party in 1980. Modi became a key organizing force for the BJP in Gujarat, ascending to the state's chief minister in late 2001.

By the time he ran for prime minister, Modi had spent more than 40 years living as a sort of political monk, with little to no family contact and countless days consumed by questions of power and religion.

In the process, Modi's goals have become much bigger than paving the way for any particular company, according to interviews with more than a dozen people who've known or long studied him. "He wants to see himself as politically immortal," says Nilanjan Mukhopadhyay, who first met Modi as a journalist more than 20 years ago and spent time with him for a 2013 biography. "He would want to become part of the pantheon of India's top political leaders."

Modi may even think of himself as India's savior. On the campaign trail in April of 2014, Modi's campaign broadcast a holographic image of the candidate and audio feed to the masses. The show was listed

on the BJP website—“Public meeting via 3D”—as beaming out across the country, at bus stands, dusty markets, and sports fields. Modi’s image strode across the stage, wearing a tunic and waving to a crowd he could not see before him. “Maybe,” he said, “god has picked me for this task.”

His decisive victory in the polls brought with it a shift in the nation’s capital. “The psychology has been that all your money used to be made in Delhi: Come handle the minister, change the rule, get advance information,” says T.S.R. Subramanian, who spent more than 35 years as a civil servant, retired as India’s highest-ranking bureaucrat, and has continued to chair government-appointed task forces on issues of development. The Modi government, in his view, is rewriting those rules. “It’s very clear: The corporates don’t have the kind of access they used to have,” he says.

Modi’s office didn’t respond to repeated requests for comment for this story. Asked about the government’s relations with the corporate sector in general and Reliance in particular, Dharmendra Pradhan, Modi’s oil minister, would only say: “Our government is policy driven. Everybody is equal in front of the government. We’re for transparency.”

In Ahmedabad, Nitin Bhatt, a senior vice president for corporate affairs at Reliance, agreed to meet with a Bloomberg reporter at a glass-fronted company office. When asked about Modi, he said, “I don’t think I will be able to speak about these things.” The interview ended not long after. Requests for comment sent to Reliance spokesmen, followed by written questions, did not result in answers. Neither Reliance nor Ambani has been charged with any wrongdoing in the break-in at Shastri Bhawan. The company released a statement saying it has “no tolerance” for the illegal behavior alleged in the case.

Modi, who turns 65 on Sept. 17, and Ambani, 58, have a history of cooperation and plenty of reasons to be aligned. Their stories are anchored by Gujarat, a west Indian state of more than 60 million people bordered by Pakistan to the north and the Arabian Sea to the west. In February 2002, just four months after Modi became chief minister of Gujarat, a series of sectarian riots left more than 1,000 people dead, most of them Muslim, and Modi’s reputation in shambles. There were many at the time who thought his political career was finished; the flash of bloodshed seemed to confirm the worst fears about the dangers of conservative Hindu leadership. (A Supreme Court–appointed panel later found no evidence that Modi gave orders to prevent help for those being attacked, as his opponents had claimed.)

Modi was humbled at a February 2003 New Delhi meeting of the Confederation of Indian Industry, as businesspeople openly questioned the “law and order” situation in Gujarat, according to Indian press accounts at the time. Modi went home trying to mend his reputation. He started an investor conference dubbed Vibrant Gujarat. The idea was simple: Gujarat was still open for business, and for those who came, approvals would be fast.

It was in part the Ambani family that rehabilitated Modi. In July 2003, Modi, with the blessings of the Ambanis, delivered a speech at an event memorializing the late Dhirubhai Ambani, Mukesh’s father and founder of the sprawling Reliance empire. “Invoking Dhirubhai’s spirit, I say to his family that Gujarat is yours, the responsibility to see it flourish is yours,” said Modi.

That the Ambanis, in full attendance, accepted Modi there and at other venues sent a powerful signal to all of India that Modi wasn’t a pariah and Gujarat wasn’t descending into chaos. It helped. Gujarat quickly regained its name as an economic hub, aided by the cash Reliance poured into its projects, including the Jamnagar oil-refining complex, which has grown into one of the world’s largest. And Modi—who was denied a visa from the U.S. in 2005 because of the Gujarat riots and didn’t enter the country until last year—became a political star launched ever higher by stories of paving the way for business.

Like the one about how he got Indian tycoon Ratan Tata to set up a car factory in Gujarat. After Tata announced in 2008 that he’d given up on another state, where his plans ran into farmer protests about land seizure, Modi sent him a text message that read “Welcome to Gujarat.” Three days later, Modi offered a proposal that snagged Tata. It included land, power, tax exemptions, and a 95.7 billion rupee ($1.5 billion) loan.

As it became clear that Modi would win in a landslide in 2014, the S&P BSE Sensex Index rose to a record level and the fortunes of India’s economic elite soared, with Ambani leading the way. From the day before final results were announced, May 15, to the end of the first trading day after, May 19, Ambani’s worth grew by $1.9 billion, due mostly to the increase in his company’s stock price, according to the

GUJARAT QUICKLY REGAINED ITS NAME AS AN ECONOMIC HUB. AND MODI BECAME A POLITICAL STAR LAUNCHED EVER HIGHER BY STORIES OF PAVING THE WAY FOR BUSINESS.

BLOOMBERG TIPS

Taking India’s Pulse

For an overview of India, you can use the Country Guide (COUN) function. Type **COUN INR <Go>** on the Bloomberg Professional service. For more data on the rupee, click on Currencies at the bottom of the screen. To see options-implied forecasts for the currency, type **FXFM <Go>**. To track Indian government bonds, type **SOVM IN <Go>**. You can use the Twitter Filter Builder (TWTR) function to view Narendra Modi’s tweets. Type **TWTR <Go>** and click on the blue Twitter handles link. Enter *NARENDRA* and click on the narendramodi Twitter Feed item. Next, enter *PRIME MINISTER INDIA* and click on the PMOIndia match for tweets from the prime minister’s office. Then click on Save. JON ASMUNDSSON

Bloomberg Billionaires Index.

The spike in Reliance Industries' stock seemed well-founded at the time: There were several issues that a business-friendly Modi administration could smooth over for Ambani. Reliance was embroiled in arbitration proceedings with the Indian government over a project in a gas field beneath the Bay of Bengal, off the country's east coast. The company had failed to produce its projected output, and the government, headed then by Prime Minister Manmohan Singh, had moved to penalize Reliance by restricting recovery of its operating costs.

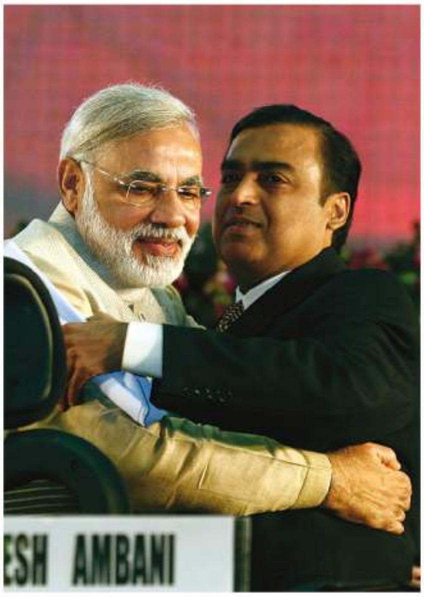
Reliance also found itself in a lawsuit with India's state-run Oil & Natural Gas Corp., which accused Reliance in the Delhi High Court of drawing gas from fields the ONGC believed it controlled, thereby depriving ONGC of tens of billions of rupees. Reliance has denied the allegations.

Atop all that, Reliance had joined gas industry allies in lobbying the government to double the price of natural gas.

Today, arbitration proceedings between Reliance and New Delhi continue. Modi's administration did approve a gas price increase. It was by 33 percent and was accompanied by an announcement that Reliance's gas field won't be eligible for the higher price until the dispute is resolved. And the ONGC lawsuit lingers.

OBSESSION WITH SELF AND IMAGE, COMBINED WITH STAGGERING AMBITION, DEFINES MODI, A VETERAN POLITICIAN SAYS. AFTER 25 YEARS, IT'S REALLY ALL HE KNOWS ABOUT THE MAN.

Not everybody is buying the Modi corporate crackdown line. In a speech to the lower house of parliament earlier this year, Rahul Gandhi, vice president of the opposition Indian National Congress party and grandson of Indira Gandhi, hammered Modi on the land acquisition bill. "One thing is perfectly clear," Gandhi said, addressing Modi. "Your government is ignoring the struggles of farmers and doesn't listen to the crying voice of the poor. Your government is the government of industrialists."



Modi embraces Mukesh Ambani, the richest man in India, in 2011.

Some see the documents investigation itself as a ruse. "I'm sure the government wants you to imagine that" it's going after the business elite, says Mani Shankar Aiyar, who served as oil minister under the previous government. For Aiyar, the documents-heist case is meaningless unless "it leads into boardrooms and reaches up to chairpersons and managing directors."

Or it may simply be that Modi these days likes some billionaires better than others. Coal-and-ports magnate Gautam Adani, worth an estimated $7 billion, has reportedly been an exception to the government access chill. In Modi's first year in office, Adani, founder of Gujarat-based Adani Group, joined Modi on several diplomatic trips as part of business delegations. His company denies any special access. "We have never sought any favor from any government at any point of time," the company said in a letter to Bloomberg in May.

The longer one looks at Modi, though, the more it seems his motivations are more deeply rooted, and plainer, than is appreciated by the political chatter praising or condemning him at New Delhi dinner parties. Ghanshyam Shah, a retired political science professor who has written extensively on governance in Gujarat, describes Modi as a loner who ultimately has ambitions, not friends. "He was and is not an average political leader who believes in petty politics," Shah says. "He has a mission; he wants to be important in history."

Two men who saw Modi consolidate power in Gujarat up close—one a businessman who's known him for a decade and the other a longtime political broker who interacted with Modi for a quarter century—gave similar assessments. Both asked that their names be withheld to avoid trouble with one of the nation's most powerful men.

The politico pointed to the suit Modi wore during U.S. President Barack Obama's visit to India in January. The garment in question had gold-colored pinstripes that on closer inspection continuously spelled out three words—Narendra Damodardas Modi, his full name.

That obsession with self and image, combined with staggering political ambition, defines Modi, the veteran Gujarat politician says. After 25 years, in fact, it's really all he knows about the man. "To make any conclusions about Modi is premature," he says. "Only history will be able to evaluate Modi."

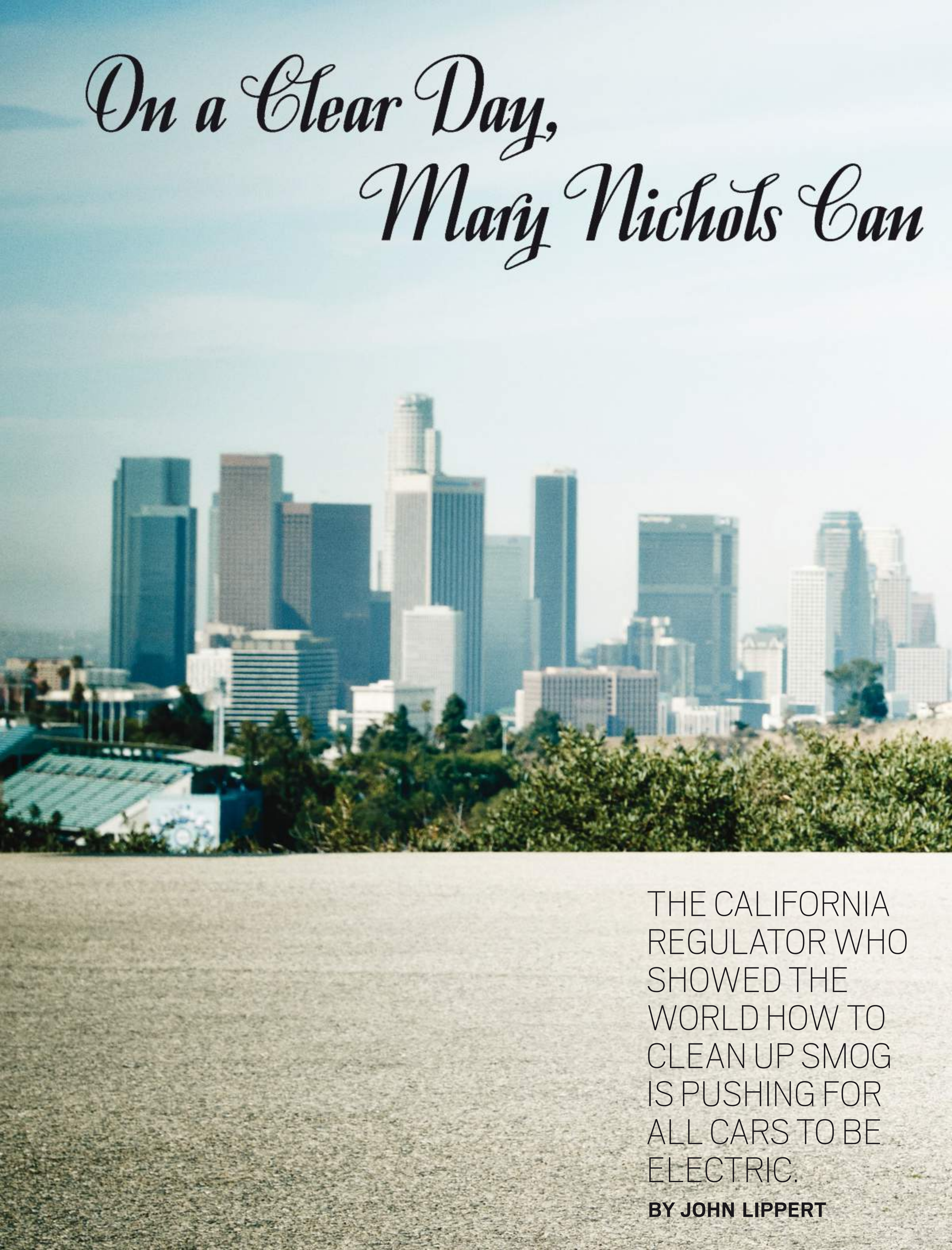
Modi's brother Prahalad says that when he finally reunited with his older brother, some 14 years after he departed for the Himalayas, they spoke about work, not family.

There may have been other things most people would have discussed, but, Prahalad said, "Narendra *bhai* is a different kind of a person." BM

With assistance from **Debjit Chakraborty**.

AMIT DAVE/NEWSCOM

On a Clear Day, Mary Nichols Can



THE CALIFORNIA REGULATOR WHO SHOWED THE WORLD HOW TO CLEAN UP SMOG IS PUSHING FOR ALL CARS TO BE ELECTRIC.

BY JOHN LIPPERT

PHOTOGRAPH BY EMILY SHUR

See the End of the Auto Industry as We Know It

Sergio Marchionne had a funny thing to say about the $32,500 battery-powered Fiat 500e that his company markets in California as "eco-chic." "I hope you don't buy it,"

he told his audience at a think tank in Washington in May 2014. He said he loses $14,000 on every 500e he sells and only produces the cars because state rules require it. Marchionne, who took over the bailed-out Chrysler in 2009 to form Fiat Chrysler Automobiles, warned that if all he could sell were electric vehicles, he would be right back looking for another government rescue.

So who's forcing Marchionne and all the other major automakers to sell mostly money-losing electric vehicles? More than any other person, it's Mary Nichols. She's run the California Air Resources Board since 2007, championing the state's zero-emission-vehicle quotas and backing President Barack Obama's national mandate to double average fuel economy to 55 miles per gallon by 2025. She was chairman of the state air regulator once before, a generation ago, and cleaning up the famously smoggy Los Angeles skies is just one accomplishment in a four-decade career.

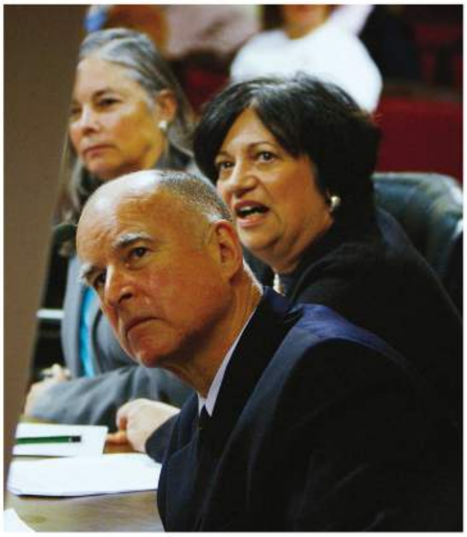
Nichols really does intend to force automakers to eventually sell nothing but electrics. In an interview in June at her agency's heavy-duty-truck laboratory in downtown Los Angeles, it becomes clear that Nichols, at age 70, is pushing regulations today that could by midcentury all but banish the internal combustion engine from California's famous highways.

"If we're going to get our transportation system off petroleum," she says, "we've got to get people used to a zero-emissions world, not just a little-bit-better version of the world they have now."

In that speech in Washington, Marchionne was talking up the little-bit-better option. He touted the improved efficiency to be wrung from traditional engines and gasoline-electric hybrids. But Nichols isn't scared of auto executives and has never accepted their vision of what's possible. (General Motors said catalytic converters, an early advance in tailpipe pollution control that Nichols promoted in the 1970s, could kill the company. They're commonplace today, and GM's not dead yet.)

Even if most people outside California have never heard of Mary Nichols, she's the world's most influential automotive regulator, says Levi Tillemann, author of *The Great Race*, a book on the future of automobile technology. "Under her leadership, the Air Resources Board has been the driving force for electrification," Tillemann says.

Nichols, who drives a tiny electric Honda Fit, acts as if she's an *unstoppable* force. California's goals for the adoption of electric vehicle technology are the most stringent in the nation, but Nichols thinks they need to be even tougher. Regulations on the books in California, set in 2012, require that 2.7 percent of new cars sold in the state this year be, in the regulatory jargon, ZEVs. These are defined as battery-only or fuel-cell cars, and plug-in hybrids. The quota rises every year starting in 2018 and reaches 22 percent in 2025. Nichols wants 100 percent of the new vehicles sold to be zero- or almost-zero-emissions by 2030, in part through greater use of low-carbon fuels that she's also promoting.



Jerry Brown and **Mary Nichols** attend a briefing on greenhouse gas emissions in 2008.

DAVID McNEW/GETTY IMAGES

The 2030 target is what's needed to meet Governor Jerry Brown's goal, set in an executive order, of an 80 percent reduction in greenhouse gas emissions by the middle of the century, Nichols says. The conventional internal combustion engine needs to be off the road by 2050 and, since cars last many years, on its way out of new-car showrooms around 2030.

Brown, 77, has had Nichols at his side as a clean-air regulator through both his governorships—his first two terms from 1975 to 1983 and his remarkable, ongoing second act. He made her a member of the Air Resources Board in 1975 and named her its chairman in 1979. By the time he returned to the capitol three decades later, Nichols had regained the chairman's job, having been tapped by Arnold Schwarzenegger. "She's smart. She's honest," Brown says. "There's no daylight between what I think and what Mary thinks on climate change."

Both Brown and Nichols emphasize that California must inspire and support action in other states and countries if there's any chance to slow or stop climate change. "If the federal government can't get it right, we in California are going to take care of business," Brown said in an April speech.

Next year, Nichols will be a key player, along with Obama administration officials, in a review and update that will set the course for the national mileage standards and her own ZEV quotas. "This review will shape the next 20 years of transportation technology worldwide," says Diarmuid O'Connell, vice president of business development at Tesla Motors. Elon Musk's company, devoted exclusively to electric cars, is an exception among

‘CLEAN AIR HAS PROVEN TO BE SOMETHING IN WHICH WE COULD MAKE REAL PROGRESS,’ NICHOLS SAYS.

Smog choking the **Los Angeles skies**, as in this 1989 photo, used to be a common sight.

TED SPIEGEL/CORBIS

automakers in pushing Nichols to move more aggressively.

California has a leadership position not just because of its size and fabled car culture but because its voters actually want the government to address global warming, says Brown, a Democrat. “We’re working against time,” he says.

Nichols says she’s motivated in part by the fear that her three grandchildren, when they’re middle-aged, could be living in a state that’s hotter and drier, with eroded beaches and less-varied wildlife. But California emits only 2 percent of global greenhouse gases, which is why Nichols wants to export her clean-air programs and ideas, especially to emerging markets. Nichols is advising China about enacting its own electric car mandate, and she’s consulting with seven Chinese cities, including Beijing, that are testing a cap-and-trade program.

“There are only a handful of people who’ve had the impact on clean air Mary has had,” says Lisa Jackson, who was the Environmental Protection Agency’s chief from 2009 to 2013 and now runs green initiatives at Apple. “She’s implemented policies that are models for the world.”

Brown is pushing the legislature to write into law his CO_2 reduction plan for 2050, thus ensuring it will outlast his tenure in Sacramento. This includes an indefinite extension of a cap-and-trade program, begun by Schwarzenegger, that requires utilities and industrial companies to buy permits for exceeding their carbon emission quotas and generates a revenue stream that Brown is using for things such as high-speed rail.

Final votes on Brown’s plans could come in September. Nichols says Brown, with the legislative battle to come, asked her not to retire two years ago, even though her husband was recovering from cancer.

The indispensable woman of California clean-air politics began as a transplant from the East. She’s from upstate New York, where her father was an electrical engineering professor at Cornell University and, for a time, mayor of Ithaca. She studied Russian literature at Cornell and attended Yale Law School, which is where she met her husband, John Daum. After graduating, they drove across the country to L.A., arriving in a city choked by smog so thick it obscured the surrounding mountains.

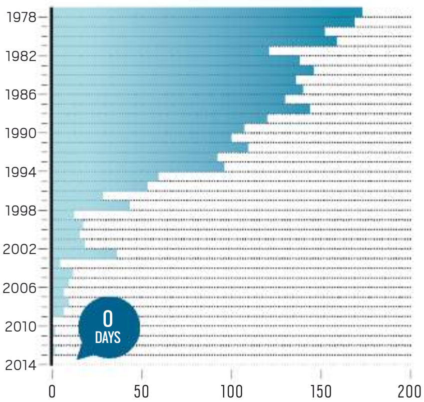
Nichols took a job at one of the country’s first public-interest law firms and quickly got involved in a 1972 suit against the federal government to test the new provisions of the Clean Air Act. Presenting the case in court, Nichols described Los Angeles air so polluted it was sickening people and harming the economy, and she argued that the EPA must force the state to develop a plan to improve it. Judge Harry Pregerson of the U.S. Court of Appeals for the 9th Circuit followed the case closely at the time. Now 91 and still on the bench, he remembers Nichols fondly and says that for many years he showed her brief for the case to young lawyers as an example of how to write. Pregerson also recalls the pollution nightmare of that era. His chambers are in L.A.’s Woodland Hills section, near the Santa Monica Mountains, with windows overlooking the Rose Bowl. “In those days, all you saw was this darkness,” he says. “It burned your eyes. It made you cough.”

Although the lawsuit succeeded, Nichols decided she could better push change in the government by working on the inside. That led her to the Air Resources Board under Brown, where she helped break new ground among global regulators by requiring specific pollution control measures—such as the catalytic converters carmakers so feared. “Whenever I hear people talk about smog as it used to be in L.A., I feel that—along with many other people—I’ve played a role in solving a really big problem,” Nichols says. “Unlike some of my

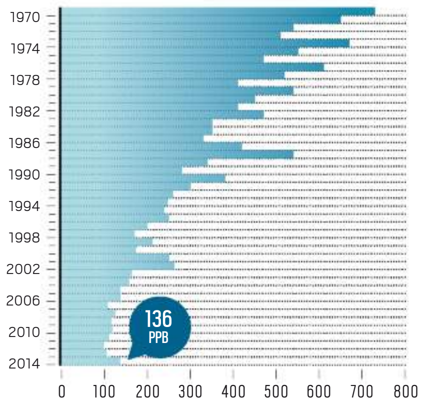
Brighter L.A. Skies

NICHOLS WORKED ON THE LAWSUIT THAT BEGAN THE EFFORT AND THEN LED THE REGULATORY PROGRAM THAT GAVE ANGELENOS DRAMATICALLY CLEANER AIR.

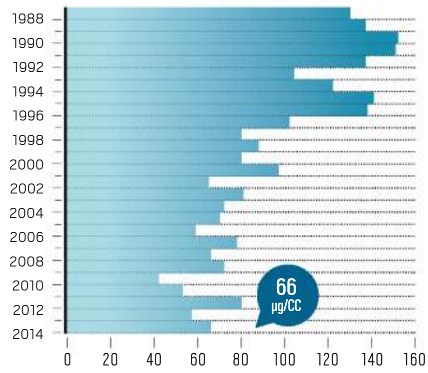
Ozone health advisories
(days per year)



Nitrogen dioxides
(highest hourly reading, parts per billion)



Particulates
(highest daily average, micrograms per cubic centimeter)



Sources: ARB, South Coast Air Quality Management District

peers who left law school with the intention of, say, ending poverty, clean air has proven to be something in which we could make real progress."

After Brown left office in 1983, Nichols worked for the Natural Resources Defense Council and other groups. In 1993, she returned to government, joining President Bill Clinton's EPA as an assistant administrator. There, she ran a groundbreaking sulfur dioxide cap-and-trade program that reduced acid rain and worked on the first national limit on fine particulates, pollution from smokestacks and tailpipes that can lodge in the lungs and cause serious health problems. She counts that rule as her biggest personal achievement.

Nichols was back in state government as head of the California Natural Resources Agency when Democrat Gray Davis was governor and out when Davis lost a recall election in 2003. But Nichols ended up working just a few years later for Davis's successor, Schwarzenegger, who wanted her environmental bona fides as he sought to write the rules for his CO_2 law. Though Schwarzenegger, a Republican, was turning to a Democrat, he says he couldn't let ideology get in the way: "Mary was quite simply the best person for the job."

While Nichols was making a name for herself battling for cleaner air, her husband was fighting for Exxon. Daum was lead counsel defending the lawsuits that resulted from the *Exxon Valdez* oil spill in Alaska in 1989, and he eventually got the company a 90 percent reduction in the $5 billion in punitive damages it faced.

Being married to an oil industry lawyer, Nichols says, probably makes her a better regulator. "I always thought it gave me extra perspective that I know something about a company like Exxon," she says.

Nichols shows enthusiasm for the science and engineering that underpin her agency's rules. "This is the heart and soul of what the ARB is about," she says during the visit to the L.A. heavy-truck lab. A few feet away, a Freightliner runs hard on a dynamometer that simulates road conditions. The board will soon propose new emission limits not just on large trucks but also on ships, trains, and forklifts, and the test Nichols watches is part of the effort to be sure the rules are viable. "We have to make sure this stuff actually works," she says.

Her approach wins over some business leaders. "Mary listens," says Ron Nichols, no relation, who is senior vice president of regulatory affairs at Southern California Edison, an electric utility that's boosting renewables while aiming to keep rate increases below the pace of inflation. "She understands business needs."

Still, if California utilities have made some kind of peace with Mary Nichols, the world's car companies mostly have not.

Nichols's rising influence is forcing them to devote design and engineering dollars to future models that will run on batteries or hydrogen fuel cells as well as gasoline engines, says Bill Reinert, a retired product planner at Toyota Motor's U.S. unit who helped redesign the Prius hybrid in 2003.

Auto executives are reluctant to complain out loud about the ZEV mandate. For one thing, they want to claim public relations points for the green vehicles they produce. For another, they don't want to cross

BLOOMBERG TIPS

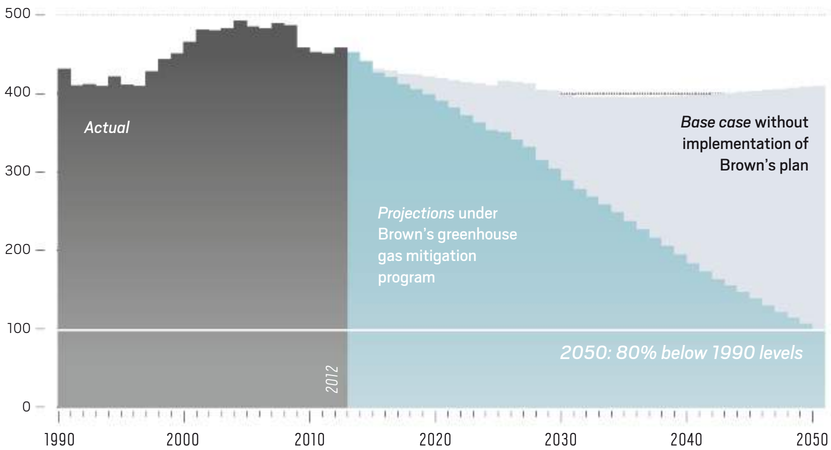
Who Sold the Electric Car?

To track automakers' monthly sales data for electric vehicles in the U.S., type **BI AUTMN <Go>** for the Bloomberg Intelligence Automobiles Dashboard. Click on Industry under Data Library on the left side of the screen. Click on the US Monthly Sales tab if it's not already selected. Scroll down to the Alternative Powertrain Vehicle Sales section and click on the plus sign to the left of Battery Electric Vehicle (BEV). In June, Fiat sold 411 of its 500e model in the U.S. For research pieces on environmental themes, click on Government under Analysis on the left side of the screen. For the Bloomberg Brief *Clean Energy & Carbon* newsletter, type **BRIEF <Go>**. JON ASMUNDSSON

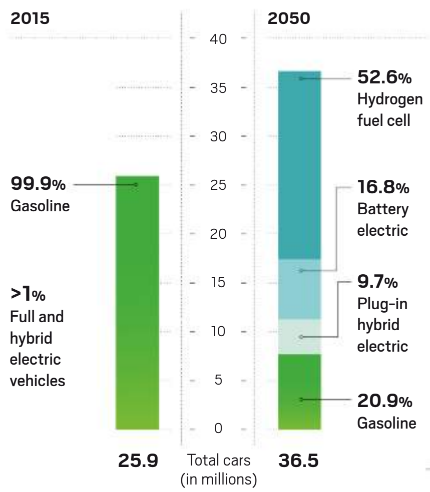
Low-Carbon Future

NICHOLS'S PUSH TO GET INTERNAL COMBUSTION ENGINES OFF CALIFORNIA'S ROADS WILL BE KEY TO MEETING GOVERNOR BROWN'S AGGRESSIVE GREENHOUSE GAS TARGETS.

California greenhouse gas emissions (CO_2 equivalent, millions of tons)



Vehicle fleet mix



Sources: ARB (emissions), E3 (autos)

Nichols. "The public relations and image people are very afraid of her," Reinert says.

Carmakers are also looking ahead to next year, when Nichols will be involved in the review of California's ZEV quotas and Obama's mileage standards. Her state program and the federal auto efficiency initiative were linked in 2009, when the federal government and California agreed to work together so carmakers wouldn't face competing rules. Changes and updates to these regulations will need to be approved by her agency, the EPA, and the National Highway Traffic Safety Administration, which has jurisdiction over fuel efficiency.

Nichols's 2030 target for zero- and almost-zero-emission vehicles is part of the jockeying in these negotiations. The ZEV mandate is more complicated than a simple numerical quota for electric vehicles. There can be a range of credits for plug-in hybrids, such as the Chevrolet Volt, and other advanced technologies (the almost-zero-emission category Nichols refers to).

GM, Ford Motor, Toyota, and Honda Motor have asked for more credits for plug-in hybrids. They argue that as battery technology improves, these will be used more and more for all-electric driving. Nichols says the mandate for truly zero-emission vehicles, powered only by batteries or hydrogen fuel cells, is vital to meet the state's 2050 greenhouse gas targets.

As a sweetener to encourage automakers to embrace these targets, Nichols says, she can offer expanded preferential access to freeways and parking spaces for ZEVs, along with more charging stations and bonuses for dealers. She mentions another possible concession: a slower acceleration of the ZEV mandate. "Time and time again, we've postponed, delayed, or stretched out the compliance path for a particular standard in return for a renewed commitment and clarity that we're going to get to the goal."

'THERE'S A REASON CHRYSLER IS THE PERENNIAL NO. 3 OF THE BIG THREE,' NICHOLS SAYS, REFERRING TO MARCHIONNE'S RESISTANCE TO ELECTRIC CAR QUOTAS.

This is a hallmark of her career: Nichols will compromise but not capitulate. How much she will give on her push for electric vehicles will be seen when negotiations really get going for next year's review.

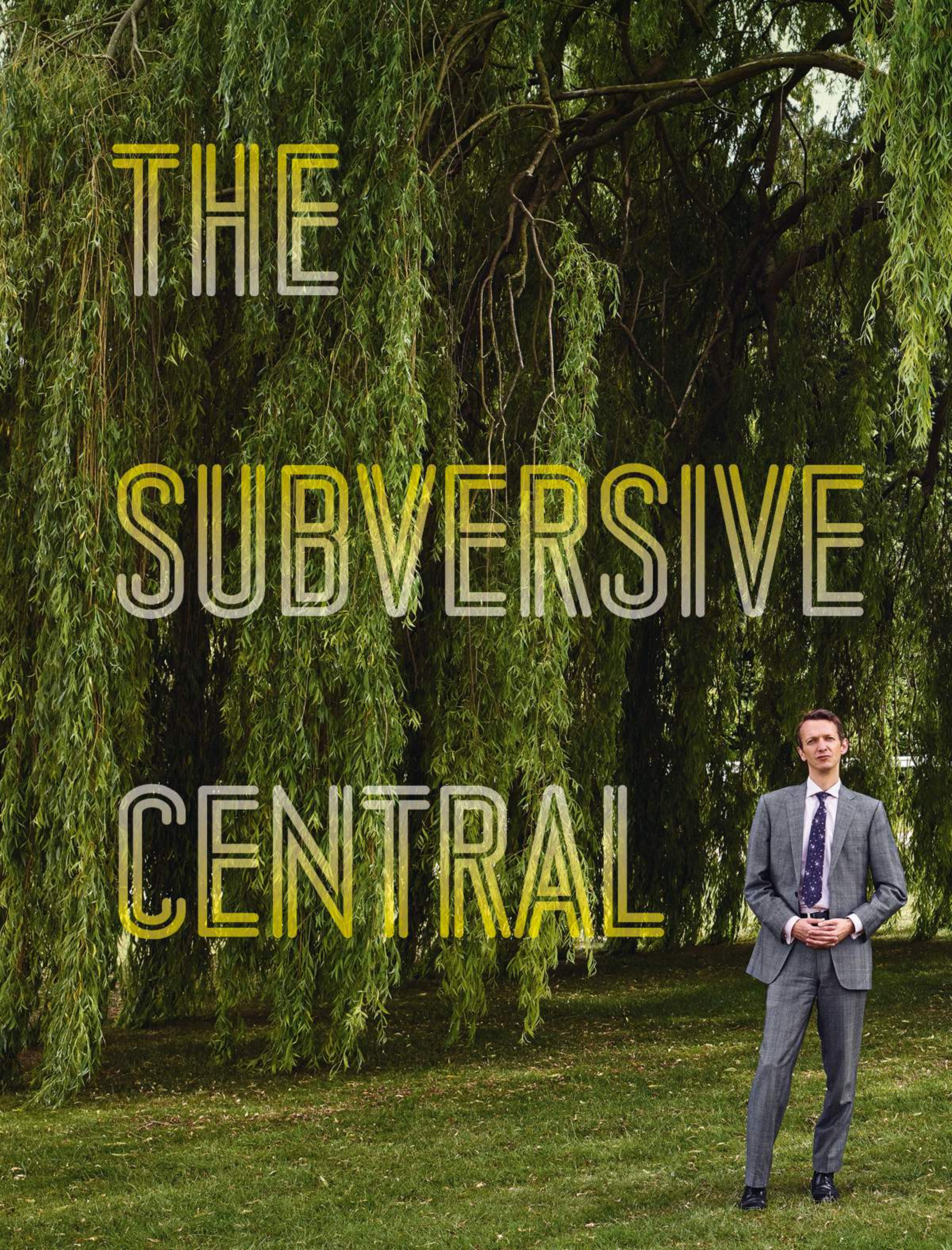
Marchionne is unusual among automakers in that he complained in public that electric car and fuel economy mandates are moving too fast. He says he will sell only as many 500e electric cars as the quota requires—not one vehicle more.

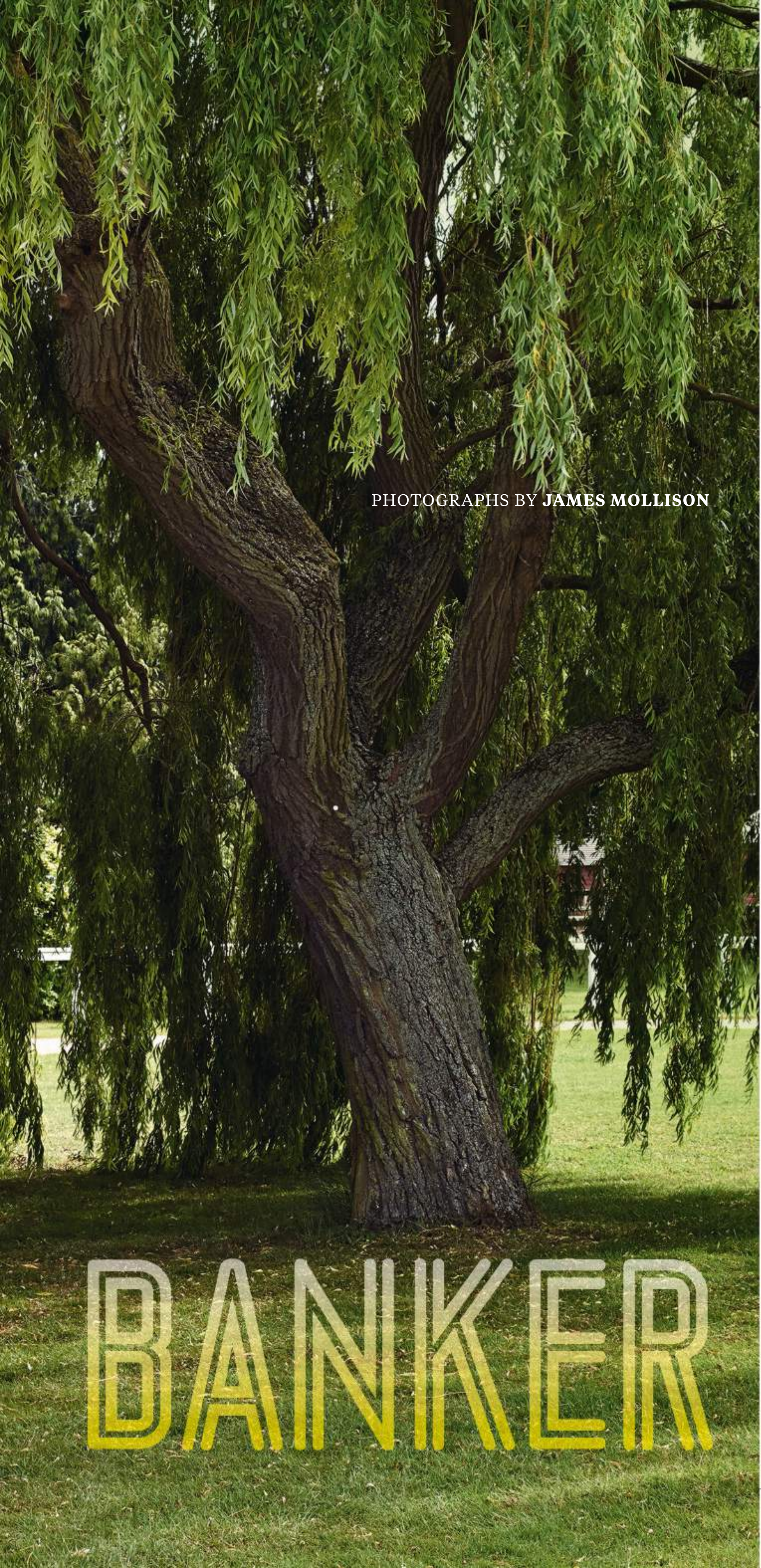
Nichols doesn't seek out on-the-record debate with automakers, but she doesn't run from it either. Asked how auto executives view her personally, she says she has no idea. She does explain that global automakers view the Air Resources Board as the most important driver for various kinds of automobile technology. The car companies are making California the central place for design and advanced engineering, she says, and they know there's a market for green innovation.

Asked about the comments from the Fiat Chrysler CEO specifically, Nichols pauses and then says: "There's a reason Chrysler is the perennial No. 3 of the Big Three." When asked a follow-up, Nichols stops the line of questioning. "That's my answer. Take it or leave it." **BM**

With assistance from **Michael Marois** and **Tim Higgins**.

THE SUBVERSIVE CENTRAL





PHOTOGRAPHS BY **JAMES MOLLISON**

BANKER

Andy Haldane has emerged as a champion of unconventional economic thinking at the Bank of England.

BY JENNIFER RYAN

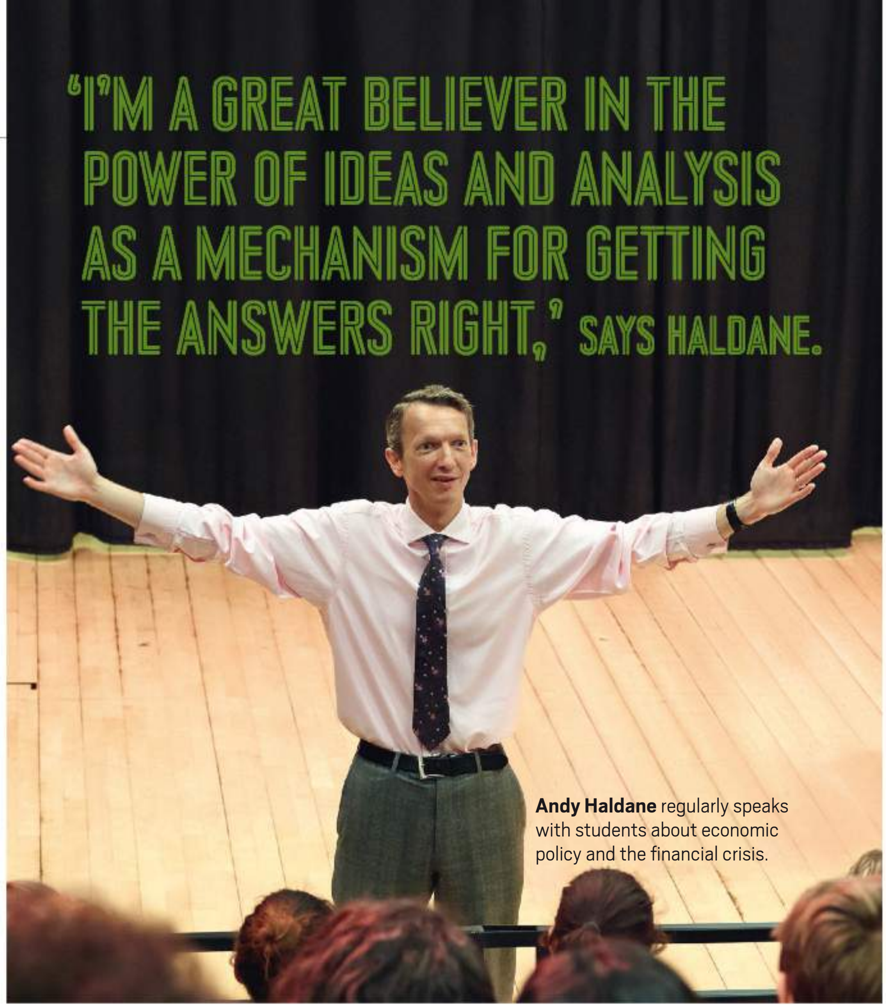
YOU'D NEVER THINK THAT ONE of the fastest-growing economies in the G-7 could possibly need *lower* interest rates. But then, you're not Andy Haldane.

The Bank of England's chief economist has made a name for himself as a free-thinking contrarian in recent years, even publicly siding with Occupy activists and likening the need for simplicity in banking regulation to a dog catching a Frisbee.

"He's an original thinker," says Robert Jenkins, a former colleague of Haldane's on the bank's Financial Policy Committee. "If the facts take him in a direction that's not politically fashionable, he nevertheless has the courage to make his statement."

The 47-year-old Haldane's latest untraditional stance is that the BOE's next interest rate move could just as easily be a cut as an increase. That's a far cry from the views of his boss, BOE Governor Mark Carney, who says the next move from the current 0.5 percent will probably be up—the first hike since 2007. Haldane, in fact, happens to be the only member of the bank's nine-person Monetary Policy Committee who's publicly countenanced a possible reduction, even after more than two years of growth in the U.K. Haldane says he's not convinced the recent wage gains will persist, and the strong pound may stifle an inflation pickup. The rate unexpectedly dropped to zero in June.

The question of how, or if, to change U.K. policy is a pressing one. More than six



Andy Haldane regularly speaks with students about economic policy and the financial crisis.

years of record-low rates risk skewing borrowers' expectations, and the prospect of an increase by the U.S. Federal Reserve as soon as this year could heap pressure on the BOE to start unwinding emergency stimulus. On the other hand, the U.K.'s inflation rate has been below the bank's 2 percent target since January 2014, and the Greek chaos could scupper demand in the euro area, Britain's biggest trading partner.

Jacob Nell, chief U.K. economist at Morgan Stanley, says Haldane's reasoning isn't so far-fetched. "The idea that he could equally go for a cut as a hike reflects a view that the costs of a persistent bout of low inflation, or even deflation, are much bigger than the costs of inflation shooting up if they keep rates this low for too long," says Nell.

Haldane has been at the BOE for 26 years. ("I've only had the one job interview," he says.) He became the bank's chief economist in June 2014, after Carney—who had arrived from the Bank of Canada 11 months earlier—moved him from the financial stability department to head of research and forecasting. Since then, Haldane and Carney have opened an advanced analytics unit, pushed into big data, and even launched a staff blog.

In his new role, Haldane is helping push the boundaries of central bank forecasting and monetary analysis. Technology, demographics, inequality, and climate change are all on the agenda now, says Haldane. "These are not topics that you typically think of as being home base for central banks," he says. "But they are the factors that will shape productivity and growth and living standards." Productivity, in particular, has become something of a puzzle in the U.K. It's mysteriously stalled since the financial crisis, jeopardizing growth and living standards as a result. "The surprise isn't so much that we had a flatline period, because that's what happens after crises, but that it's persisted," says Haldane.

Ever since Haldane's Yorkshire childhood, where he witnessed the pain wrought by the soaring unemployment of the 1970s, he's believed in the ability of economics to improve public policy and make people's lives better. It's still true now: "I'm a great believer in the power of ideas and analysis as a mechanism for getting the answers right," he says.

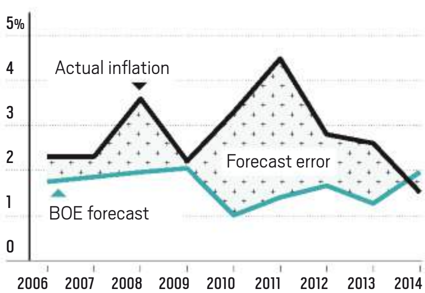
His unorthodox rate call doesn't sit well with everyone, though. "I don't really understand Haldane's position on this," says Andrew Sentance, senior economic adviser at PricewaterhouseCoopers and a former BOE policy maker. "There's not much lower you can go, and a cut to 0.25 percent isn't going to have a significant impact on the economy."

Still, Carney will have to get used to the dissent. The fact that MPC members have equal votes gears the system for disagreement—unlike at the Bank of Canada, where Carney, who was governor from 2008 to 2013, took sole responsibility for policy changes.

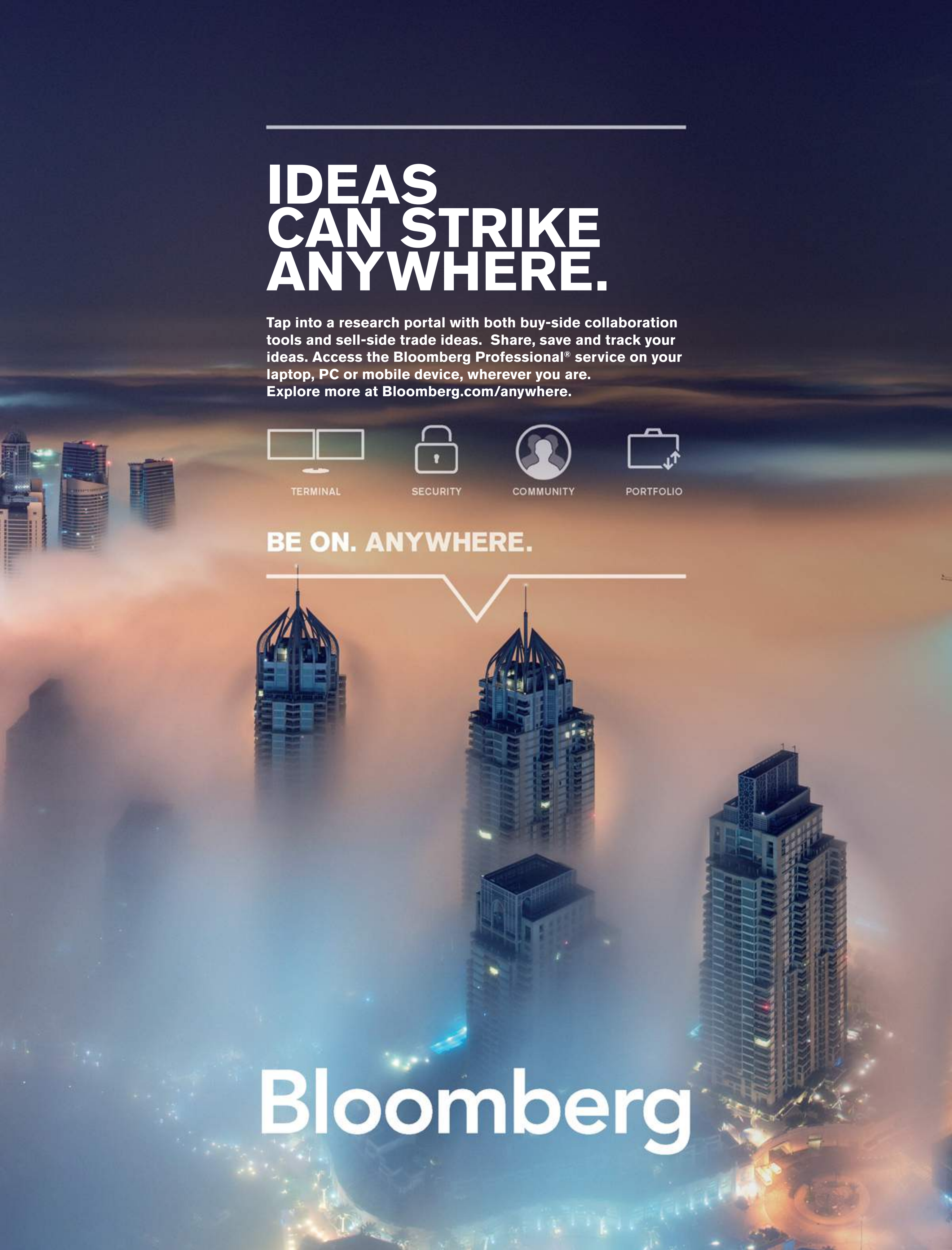
Haldane's commitment to producing better answers to challenging questions extends beyond the BOE's walls, too. He co-founded a nonprofit organization that helps economists work with charities to analyze the effectiveness of their services, and he has worked to overhaul the teaching of his discipline. Haldane even appeared in *Boom Bust Boom*, a 2014 film directed by Terry Jones (of Monty Python fame) about the shortcomings of economics in predicting the crisis. "His call for the old banking rule book to be ripped up and replaced with a simple set of standards made him someone we wanted to talk to," Jones says. BM

OFF THE MARK

The Bank of England has had big misses in its two-year projections for consumer price inflation.



Sources: Bank of England, Bloomberg, U.K. Office for National Statistics


IDEAS CAN STRIKE ANYWHERE.
Tap into a research portal with both buy-side collaboration tools and sell-side trade ideas. Share, save and track your ideas. Access the Bloomberg Professional® service on your laptop, PC or mobile device, wherever you are.
Explore more at Bloomberg.com/anywhere.
TERMINAL
SECURITY
COMMUNITY
PORTFOLIO
BE ON. ANYWHERE.
Bloomberg

BY BRYAN GRULEY

‘AS FAR AS

PHOTOGRAPHS
BY
JESSE CHEHAK

WHAT DOES IT TAKE TO SELL A TEXAS PROPERTY THE SIZE OF A SMALL NATION?

THE EYE CAN SEE'

THEY'RE FINDING OUT AT THE FAMED WAGGONER RANCH.

FOR SALE: LARGEST RANCH IN THE U.S. WITHIN A SINGLE FENCE. TEXAS FIXER-UPPER WITH MORE THAN 1,000 OIL WELLS; 6,800 HEAD OF CATTLE; 500 QUARTER HORSES; 30,000 ACRES OF CROPLAND; TOMBSTONES FOR LEGENDARY COWBOYS, LONG-DEAD DOGS, AND A HORSE BURIED STANDING UP. FAVORITE OF WILL ROGERS AND TEDDY ROOSEVELT. COLORFUL HISTORY OF DRINKING AND DIVORCE. FIFTEEN-MINUTE DRIVE TO RIB-EYES AT THE RUSTY SPUR IN VERNON. IDEAL FOR SAUDI OIL SHEIKS, BILLIONAIRE HEDGE FUNDERS, AND DOT-COMMERS WHO CAN TELL A COW FROM A STEER. PROFITABLE. ZERO DEBT. PROPERTY TAXES ONLY $800,000 A YEAR. PRICE: $725 MILLION.

"IT TAKES DAYS TO SEE IT ALL," says Bernard Uechtritz. The real estate broker is steering his black Ford F-350 pickup over one of the hundreds of miles of roads ribboning the W.T. Waggoner Estate Ranch 175 miles (280 kilometers) northwest of Dallas. Squinting into the sun, Uechtritz gestures to the sky on his right. "Everything you can see, as far as the eye can see, is the ranch," he says. He points straight ahead, then behind him, then left. "Each horizon is this ranch."

Uechtritz *(YOO-tridge)* is one of two brokers entrusted with the singular task of selling the Waggoner ranch and everything attached to it, from the 29 tractors, to the cut-rock polo barn, to the emptied bottles of Old Taylor bourbon in an abandoned hunting lodge. At 510,527 acres (207,000 hectares), or 800 square miles (2,072 square kilometers), the Waggoner sprawls over six counties and is bigger than Los Angeles and New York City combined. At almost three-quarters of a billion dollars, the asking price is more than quadruple the biggest publicly known sum fetched by a U.S. ranch, $175 million for a Colorado spread in 2007. The Waggoner is one of the 20 largest cattle ranches in the U.S. and is known worldwide for its quarter horses.

It's been owned by the same family almost as long as Texas has been a state. Last year, a judge in Vernon—a town of about 11,000, 13 miles north of the ranch—ordered a sale of the property and appointed Uechtritz and a co-broker to market it worldwide. The ruling of District Judge Dan Mike Bird ended more than 20 years of litigation between opposing branches of the Waggoner family who couldn't agree whether to liquidate the property or split it up among themselves.

"It's history," says Uechtritz, a blue-eyed, square-jawed 50-year-old who can pass for the Marlboro Man—until he greets you with "G'day" in his Australian accent. "What we're doing here never happened before and will never happen again."

As Uechtritz drives the ranch on this warm June afternoon, he takes a call from an oilman in Europe. Over speakerphone, the guy says his company tried to bid for the Waggoner years ago, "but all we got was bullshit." Uechtritz tells him, "That's not going to happen, mate."

He wends his pickup past an old rodeo corral, a truck scale, and a cook shack where cowboys still gobble pre-dawn biscuits and gravy, as they have for more than a century. Uechtritz says the European caller is among more than 600 people who've expressed interest in the ranch, "ranging from the really real to the really not." He says he's confident a sale will close by year's end. His co-broker on the deal is Sam Middleton, of Chas. S. Middleton & Son of Lubbock, Texas. That firm and Uechtritz's employer, Briggs Freeman Sotheby's International Realty of Dallas, each will collect a commission of $7.625 million if the ranch commands its asking price.

Uechtritz acknowledges a new owner might sell the property off in pieces, fire its 120 employees, and let the Waggoner brand fade away. "That would be a tragedy," he says. "The challenge is not finding the money; it's finding the steward. Who is going to put the money up, keep putting the money in, keep the brand alive? I think you owe it to the families who build ranches like the Waggoner."

* * *

ON CHRISTMAS DAY 1909, W.T. "Tom" Waggoner gave his three children land, cattle, and horses valued at $6 million—about $150 million in today's dollars. Waggoner, whose kids called him Pappy, wasn't even that wealthy yet.

He was a cattle and horse man like his father, Dan Waggoner, who started buying acreage around 1850. The ranch went from large to vast after the Waggoners earned $55,000 selling longhorns on a Kansas cattle drive in 1870. By the 20th century, the Waggoner reverse-triple-D brand was a Texas icon. Train loads of spectators came to watch President Teddy Roosevelt hunt wolves on the property. Will Rogers, the most famous American humorist of the 1920s and early '30s, visited frequently, sometimes playing polo.

Watering cattle was a challenge then, as it is today. Tom Waggoner was irked that his ranch hands kept finding crude oil when they drilled for water. He calmed down after the rise of the automobile. Rogers joked, "I see there's an oil well for every cow."

The Waggoners roared into the 1920s as one of the richest and most colorful families in Texas. Tom's daughter, who would come to be known as Electra I, spent $90,000 (about $1 million

in today's dollars) remodeling a Dallas mansion to accommodate 350 pairs of shoes; a vault of emeralds, diamonds, and pearls; and a closetful of fur coats, according to a 1995 history by Roze McCoy Porter.

Electra I's brother E. Paul had an eye for splendid horses, good whiskey, and poker. Her other brother, Guy, went through eight wives. Pappy became so worried about the family fortune that, in 1923, he corralled its assets into a trust that gave his children and grandchildren a measure of ownership and income, but no control. The trust would serve its purpose for about two generations.

Through most of the 20th century, the ranch grew richer in both money and prestige. In 1952, it opened a two-story art deco–style headquarters in Vernon, across the street from the birthplace of the singer Roy Orbison. The managers who ran the Waggoner's cattle, horse, oil, and other businesses reported there to the trustee overseeing the family holdings. The building sported marble floors, wood-trimmed walls, and the only escalators between Dallas and Amarillo. A car wash and shoeshine stand greeted employees parking in the garage.

As grandly as things were going, they probably could have gone even better. Deer, feral hogs, quail, turkeys, and water fowl were abundant on the ranch, but commercial hunting was not allowed (and still isn't). Only about a 10th of the ranch's total acreage has been explored for oil even as some 40 operators lease plots where they pump crude from more than 1,000 wells. "The ranch was run really conservatively," Uechtritz says. "The oil made everybody comfortable. There wasn't a drive to do anything more than what was necessary to live well."

Cowboys with names like Pig Eye and Banjo tended a cattle herd that grew to 16,000 head. The brown stallion Poco Bueno became the first quarter horse ever to be insured for $100,000. After he died, in 1969, Pokey, who sired more than 400 foals, was buried standing up beneath a trapezoidal 4-ton slab of granite, per instructions left in E. Paul Waggoner's will.

The family's most famous member was Electra Waggoner Biggs, E. Paul's daughter, known as Electra II. From her second-floor studio in a Spanish-style villa on the ranch's Santa Rosa Lake, Electra II became nationally renowned for sculpting busts of Dwight Eisenhower, Harry S. Truman, and Knute Rockne. She was once linked romantically to actor Cary Grant and was the namesake of General Motors' Buick Electra sedan.

The villa where she lived with her second husband and two daughters has been vacant and basically untouched since her death in 2001. Dusty boxes and artificial Christmas trees clutter a high-ceilinged ballroom. Her daughters' beds are still dressed in pink satin. Atop a pile of miscellany in the kitchen rests a framed photo of Ronald Reagan, signed to Electra II. "At one time," Uechtritz says as he walks the grounds, "this place held a lot of laughter."

Electra II was 78 years old in 1991 when her attorney filed a lawsuit seeking the appointment of a court-ordered receiver to liquidate the estate. The extended Waggoner family had been squabbling for years over the ranch's future, with one branch

Brokers **Bernard Uechtritz**, left, and **Sam Middleton** at ranch headquarters. The commission on a sale could reach $15.25 million.

saying it should be divided in half and Electra’s side arguing for liquidation.

She had been dead for 12 years when the dispute finally came to a head in 2013. By then, the ranch was due to be auctioned off and a real estate broker with a funny accent was snooping around the Wilbarger County courthouse in Vernon.

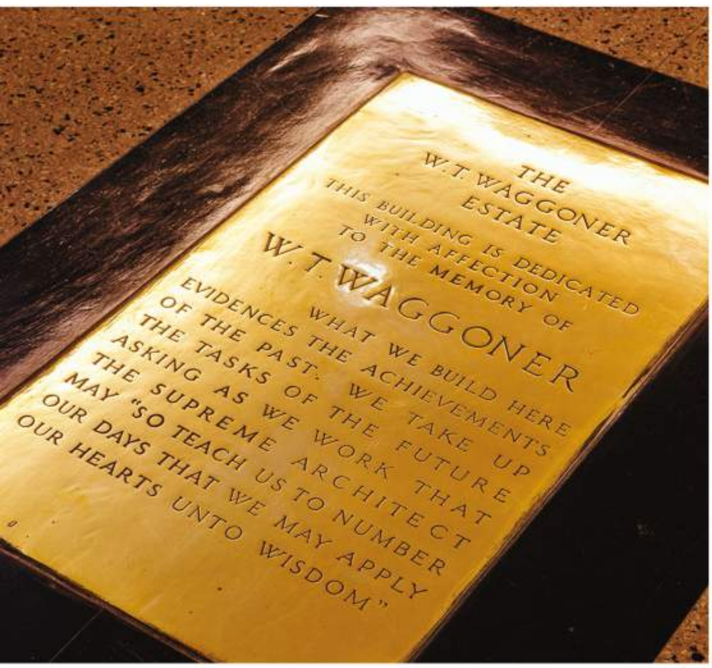
* * *

UECHTRITZ ESTIMATES HE’S PUT 30,000 MILES on his truck and eaten 100 steaks at Vernon’s Rusty Spur over the past two years. He says he couldn’t resist the Waggoner. “This listing has been 20 or 30 years in the making. Literally hundreds of brokers tried to get it.”

One could argue that the Waggoner couldn’t resist Uechtritz. He grew up in Papua New Guinea, where he managed a plantation with coconuts, cocoa, and cattle. After visiting the U.S. on a walkabout, he stayed to play polo. Mallets and helmets decorate his Dallas office.

He got his first real estate license in California in 1993. The next year, he sold the Beverly Hills mansion left by Jose and Kitty Menendez after they were gunned down by their two sons in 1989. After Uechtritz moved to Texas, *The Land Report* magazine named his 2011 sale of the bankrupt Camp Cooley Ranch in Hearne the deal of the year. At an auction on a day when the Dow dropped 512 points, the 10,600-acre spread sold for $28.5 million.

When Uechtritz started nosing around the Waggoner in 2013, disagreements were strong between Gene Willingham, the husband of one of Electra II’s daughters, Helen, and A.B. “Buck” Wharton III, a grandson of Electra I. The two men had become co-directors of the ranch, overseeing business operations after the last of several trustees resigned in 1989. Although they have offices steps apart in the Vernon headquarters, for years they rarely spoke to each other except through intermediaries. Uechtritz says their relationship has



Clockwise from top left: the **main entrance** to the Waggoner; a scene from the lobby of **ranch headquarters** in Vernon, including a portrait of the beloved **Poco Bueno**; a pair of mechanical witnesses to the Waggoner’s history; a **plaque** at headquarters.

Inside the **sculpture studio** of Electra II, at the villa on the ranch's Santa Rosa Lake

But Wait, There's More

A smattering of the more than 4,000 items listed on the 183-page inventory of things being sold with the Waggoner ranch:

* Two-story art-deco marble office building
* Pink poodle lamp
* Horse head lamp
* Muzak paging system
* IBM Selectric typewriter
* Steel barn, 21-feet-by-80-feet
* Cut-rock polo barn
* Wagon boss house
* Spanish-style villa on Santa Rosa Lake
* Cook shack
* 1998 Bell 206B-3 JetRanger II helicopter
* Dogs named Shoog, Bee, Jazz, CoCo, and Brute
* 325-bushel Oklahoma Pride cattle feeder
* John Deere 672 hay rake
* 2001 Caterpillar 135H road grader
* 6,500-gallon vertical liquid-fertilizer storage tank
* Miller Bobcat 225 NT welder
* 2014 Ford F-250 pickup truck
* Frontier MS1117 manure spreader
* 1973 Ford two-ton firetruck
* 1984 International firetruck
* 1998 16-foot-by-80-foot Masterpiece mobile home
* Waterline from Vernon, Texas
* Grave marker for cowboy Tony Hazelwood
* Painting of stallion Poco Bueno

improved in the past year to the point where they've sat together and chatted in court.

In 2004, a local judge had appointed a receiver charged with liquidating the estate. The family then argued for a year in appellate court about the meaning of *liquidation*. The case languished until 2011, when a new receiver, Vernon attorney Mike Baskerville, was appointed. Baskerville immediately moved to have the ranch appraised and surveyed, efforts that also wound up in court.

By 2013, Bird was on the case. Baskerville started interviewing ranch-auction specialists. With the family ignoring purchase inquiries, he says, "I didn't really have any choice. I could sit there till the good Lord called me, and nothing was going to happen if I didn't have a way to push the process."

Uechtritz was busy ingratiating himself with Willingham, Wharton, and their lawyers. He sat in a back row at hearings in the courthouse on the square in Vernon. Privately, he kept telling family members that an auction was sure to result in the ranch's being broken into pieces and employees losing their jobs.

The latter in particular resonated. "The whole thing is like family," says Willingham, 74. He has lived on the ranch with his wife, who grew up there, since 1975. "When you live here with all these people, the workers, the cowboys, their headaches and problems, their joys and their sorrows become yours." His eyes turn sad at the thought of having to move away. "It's going to be heartbreaking."

Buck Wharton's daughter, Brooke Wharton, says, "It's a shame that the ranch is for sale." She helps manage the horse operation and hoped one day to run the whole ranch with her brother. "I really hope that whoever gets this ranch will keep it as a working cattle ranch," she says. "The cowboy and ranching way of life is dying anyway, so to see something like this completely get lost, it'd be a big loss."

Bird set a hearing for Nov. 20, 2013, to confirm the hiring of an auction company. At 5 a.m. that morning, Uechtritz met an attorney representing one side of the family in the parking lot of the Wal-Mart Supercenter in Vernon. He gave the lawyer papers outlining what he called a "stalking horse" offer from a Dallas oilman to buy the entire ranch for $550 million.

Because of that unsolicited offer, the two family branches—showing unity for the first time in decades—jointly made a "new development" filing asking the judge to postpone hiring the auction firm. He complied and nine months later handed the Waggoner listing to Uechtritz and co-broker Middleton, whose fourth-generation firm is legendary in west Texas. After hearing Uechtritz's accent, Bird said, "If you will speak English, it will work better." As for the sale, the judge said, "It can move fast, it can [move] slow, but I want it to move."

* * *

TWO DOORS FROM UECHTRITZ'S OFFICE at ranch headquarters, a computer sits on a table resting on shag carpet. The computer in room 207 is filled with financial and geological detail about the ranch's oil-and-gas business. To peer inside, interested parties must come in person, after proving they can raise enough money to buy the Waggoner. Next door, in room 206, they can also scour maps and binders of proprietary ranch data.

They may scribble notes, but no printouts or copies are allowed.

They're trying to divine what the ranch is truly worth. When people at the Sotheby's office in Manhattan heard last year that its Briggs Freeman affiliate in Dallas was listing a ranch for $725 million, "they thought it was a joke," says Robbie Briggs, president and CEO of Briggs Freeman.

By one measure, the ranch is a deal. According to the U.S. Department of Agriculture, Texas pastureland last year sold for $1,580 an acre—up 9 percent from 2013 and $160 an acre more than the ranch's $1,420. Overall, the U.S. ranch market has been robust the past two years as beef prices have risen and investors have sought havens that offer appreciation as well as income, says Jim Taylor of Hall & Hall, a rural real estate firm based in Billings, Montana, and Denver.

The Waggoner's size and price defy comparison, though. The top price listed in *Western Livestock Journal*'s June properties issue was $64.5 million for a 126,000-acre ranch in Montana, and most listings were less than $10 million.

Taylor says the Waggoner valuation seems aggressive. Assuming smart investors won't risk more than 10 percent of their net worth, "you're looking for people with a net worth of $7 billion or $8 billion," he says. "Then you've got to find somebody that not only wants to own a ranch but an oil-and-gas business. The only person out there would be maybe somebody who would buy it with the idea of taking it apart."

Waggoner cowboy **Ricky Rios** and his son **Luke**. The fate of the ranch's employees will depend on the buyer's plan.

The U.S. ranch market has been robust the past two years as beef prices have risen. The Waggoner's size and price defy comparison, though.

Price aside, the Waggoner lacks the picturesque beauty of ranches for sale in Montana and Colorado. Water is scarce. Abundant mesquite competes with grazing cattle for moisture and nutrients. The plunge in oil prices may have discouraged some potential buyers, including oil-savvy Texans.

Yet much of the ranch remains underdeveloped. Longtime Waggoner cattle boss Weldon Hawley says he could see a buyer doubling the herd. Robert Grunnah, a principal at Novus Realty Advisors, a Texas land specialty firm, says leasing land to hunters could bring in millions of dollars a year. Wind farms visible from the ranch testify to another potential source of revenue: energy to supplant coal-fired electricity plants likely to close in Texas. A power plant connected to a grid that feeds Abilene—and that could service the booming Dallas–Fort Worth metroplex—squats just outside the Waggoner's northern border.

The Waggoner family will retain 25 percent of the mineral rights in any sale, suggesting they believe there's petroleum to be found in the vast swath of the ranch that has not been explored. There might also be money in the sea of brackish water beneath the ranch. Uechtritz says desalination companies have shown interest in licensing the right to tap it, process it, and sell it to neighboring towns. "It looks like there could be a great deal of value there," says economist Charles Gilliland of Texas A&M's Real Estate Center.

If all of this sounds pie in the sky, there's a down-to-earth analog. The King Ranch in south Texas—it's actually larger than the Waggoner, albeit on several different parcels—faced a similar family crisis, which was resolved through the hiring of an outside CEO in the 1990s.

Today, the King is an agribusiness empire with interests in cattle, cotton, sod, pecans, citrus, and hunting. Uechtritz points out that his pickup is one of Ford's King Ranch–branded models, and he doesn't see why the Waggoner's reverse-triple-D couldn't appear on a Chevy or Dodge truck. If the Waggoner is worth $725 million, the King is worth $1.1 billion, Grunnah estimates.

Uechtritz says, "Any broker can sell something for a price." He's driving off the Waggoner ranch now, heading for yet another steak. His straw cowboy hat rests on the dashboard. Earbuds dangle from his neck. "I don't want to be known as the guy who sold the Waggoner," he says. "I want to be known as the guy who helped save it." BM

With assistance from **Jeff Wilson** and **Anita Kumar**.

DEAL MAN IN THE STANS

PRIVATE EQUITY INVESTOR AIDAN KARIBZHANOV IS CHASING RICHES IN THE ROUGH-AND-TUMBLE FORMER SOVIET REPUBLICS OF CENTRAL ASIA.

BY NARIMAN GIZITDINOV

PHOTOGRAPHS BY PETR ANTONOV

Aidan Karibzhanov and his wife, former ballet dancer **Makpal Karibzhanova**, pose in the couple's Almaty home.

FROM

the second-floor balcony of his spacious hillside home in Almaty, Kazakhstan, Aidan Karibzhanov takes stock of his sprawling empire, which stretches over some of the world's most resource-rich and politically challenging territory. He looks out at the high-rise headquarters his Visor Holding investment firm shares with the Ritz-Carlton hotel. To the southwest, beyond the snow-capped Trans-Ili Alatau mountains, Visor owns Kyrgyzstan's top grocery chain, and Karibzhanov has invested more than $200 million in that country's second-largest gold mine. Closer to home, Visor owns a cement plant and an oil company in Karibzhanov's native Kazakhstan.

In the past decade, Karibzhanov, 43, has emerged as an investing power in a region ripe with both potential and peril. He's focused his efforts on the five rough-and-tumble former Soviet republics known collectively as the Stans: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The Stans may be home to only 68 million people, but they sit on about 2 percent of the world's oil reserves, 11 percent of its natural gas, and 14 percent of its uranium. And they grew at the China-like annual pace of 8.1 percent from 2001, when Karibzhanov founded Visor, through 2014, according to the European Bank for Reconstruction and Development.

"Visor Holding is absolutely a key player in the region," says Ian McCall, a money manager at Geneva-based emerging-markets investor Quesnell Capital. "The firm showed the biggest breadth and number of deals to us, whether it was in mining or oil and gas."

In a part of the world where the rule of law can be subject to the whims of rulers, Karibzhanov fights many of his battles not in the marketplace but in court. In Uzbekistan, he sued the government of President Islam Karimov after it took control of an Uzbek plant in Visor's four-country cement empire in 2012. Two executives there are still in jail. "It was a treacherous act to take away our assets," he says.

DEAL MAN IN THE STANS

Visor, with $500 million under management, is one of the few private equity firms operating in the Stans. Visor Capital, its investment-banking unit, is licensed by the U.K. Financial Conduct Authority to trade securities in London. In 2012, Visor Capital was among the managers of the London initial public offering of Kazakh mobile-phone company Kcell, a unit of Sweden's TeliaSonera. TeliaSonera raised $525 million in the offering.

Karibzhanov, who grew up in Soviet-era Kazakhstan, understands the relationships investors need to navigate countries where presidents are overthrown and allegiances change overnight. In the 19th century, Central Asia was the site of the Great Game, which pitted Britain against Russia in a quest for trade routes to the East along the Silk Road. Flung into independence after the Soviet Union collapsed in 1991, the Stans have emerged as a new Great Game, in which Russia, the U.S., China, and large European economies are vying for access to the area's natural resources and growing consumer base.

Companies have piled into the region. Exxon Mobil, Eni, and Royal Dutch Shell have spent more than $48 billion collectively developing oil in the Kazakh part of the Caspian Sea. Last year, China National Petroleum began gas shipments through the third leg of a 1,830-kilometer (1,140-mile) pipeline that starts in Turkmenistan and runs through Uzbekistan and Kazakhstan to northwestern China.

Visor started smaller—but made big money, Karibzhanov says. He formed the firm with $1 million of proceeds from his sale of an undisclosed stake in a local lender called Kazkommertsbank, where he headed the securities joint venture. Visor bought Kazakh drugmaker Khimpharm in 2002 and sold it to generic drug manufacturer Polpharma in 2010 for what he says was a 300 percent return. He declined to provide details. Next came an oil company in Kazakhstan and a total of seven cement plants and one processing facility in Kazakhstan, Kyrgyzstan, Russia, and Uzbekistan. Moving further afield, he invested in mobile-phone operators in Nepal and Cambodia. He remains Visor Holding's largest shareholder, with a stake of at least 9.99 percent. Karibzhanov says he averages 20 percent returns and holds investments for about five years.

Picking the right partner is crucial when investing in the region, says Chris Weafer, a senior partner

Karibzhanov, far right, appears with Kazakh President **Nursultan Nazarbayev**, third from right, at Kazkommertsbank in 1999. Karibzhanov worked at what's now the nation's largest lender before founding Visor in 2001.

THE NEW GREAT GAME

	POPULATION (IN MILLIONS)	GDP (IN BILLIONS)	PER CAPITA GDP	EASE OF DOING BUSINESS[1]	CORRUPTION[2]	GLOBAL RESOURCES[3]	PERCENTAGE OF WORLD OIL RESERVES	PERCENTAGE OF WORLD NATURAL GAS RESERVES
KAZAKHSTAN	17.3	$212.2	$12,276	77	126	41% OF URANIUM OUTPUT; 12% OF RESERVES	1.8%	0.8%
KYRGYZSTAN	5.8	7.4	1,269	102	136	5.3% OF MERCURY PRODUCTION	NA	NA
TAJIKISTAN	8.4	9.2	1,099	166	152	1.6% OF MERCURY OUTPUT	NA	NA
TURKMENISTAN	5.3	47.9	9,031	NA	169	9.3% OF NATURAL GAS PROVED RESERVES	>0.0004%	9.3%
UZBEKISTAN	30.7	62.6	2,037	141	166	3.6% OF GOLD OUTPUT; 3.0% OF RESERVES	>0.0004%	0.6%

[1]World Bank ranking. [2]Transparency International Corruption Perceptions Index (Somalia most corrupt at 174). [3]All resource data for 2014 except 2013 uranium reserves for Kazakhstan. Sources: BP, U.S. Geological Survey, Transparency International, World Bank, and World Nuclear Association

at Moscow-based consulting firm Macro Advisory. "Central Asia depends a lot more on relationships than Eastern Europe, Africa, or even Russia do," he says.

Russian banker Bairam Valiyev says Karibzhanov's ties and his roots in the Stans give him insights—and opportunities—other investors lack. Visor's role in the IPO of Kcell is one example. "Visor Holding is one of the most mature investment houses in Central Asia," says Valiyev, who heads Central Asia investment banking at VTB Capital, a unit of Russia's second-biggest bank. "They are very disciplined in the way they do deals."

Or as disciplined as an investor in Central Asia can be. "There are costs of doing business in any emerging market," Valiyev says. "But when politics and business cross paths, a deal's risk can spiral out of control."

Karibzhanov has confronted some unprofitable—and dangerous—situations in jousting with the region's power brokers. After working with Aidar Akayev, the son of Kyrgyzstan's first president, Karibzhanov says he took over an agreement held by a Russian businessman to buy a mobile-phone company owned by Akayev's family. In 2004, Karibzhanov sold a controlling stake in the firm, at the time called Bitel, to another Russian, this one billionaire Mikhail Fridman. President Askar Akayev was overthrown the next year. The phone venture owned by Karibzhanov and Fridman sued Aidar Akayev's company for not fulfilling a contract to sell Bitel to them. Fridman sold his stake in the phone business to Karibzhanov in 2006 and settled his legal issues with a separate Bitel buyer in 2013. Karibzhanov went on to build a new company called NUR Telecom using Bitel's licenses. He's offering that company for sale.

Karibzhanov entered his next deal in 2007 through a relationship with Kyrgyzstan's new president, Kurmanbek Bakiyev. Karibzhanov says he acquired the rights to a gold project in the country from businessman Badri Patarkatsishvili. Maksim Bakiyev, the president's youngest son, pitched the deal. Visor wound up owning 60 percent of a joint venture with Bakiyev's government. This time, the president was deposed, and the government annulled the license. Karibzhanov says he sold the

Gulnara Karimova is a daughter of President Islam Karimov of Uzbekistan, which has taken control of one of Visor's cement plants there. She has sought fame as a pop star called Googoosha.

LEFT: COURTESY OF AIDAN KARIBZHANOV; THIS PAGE: YVES FORESTIER/GETTY IMAGES

Karibzhanov stands in front of the glass tower in Almaty where his **Visor Holding** has its headquarters.

company at a loss to a Kazakh investor.

Karibzhanov's biggest legal battle is still percolating. In 2006, he bought two cement plants in Uzbekistan, the most repressive of the Stans. A year earlier, President Karimov's troops had shot hundreds of people protesting the government's prosecution of local businessmen on extremism charges, according to the Organization for Security and Cooperation in Europe. Karimov set his sights on Visor. In 2012, the government accused the firm's United Cement Group of tax evasion, arrested several executives, and seized a controlling stake is one of the plants. Karibzhanov sued the government in 2013 in the International Centre for Settlement of Investment Disputes, a unit of the World Bank. He wants to restore his control or receive $800 million in compensation. He's still trying to get his people out of prison.

Like earlier mishaps, the saga is snarled in personal connections. Karibzhanov says he bought the two Uzbek plants from President Karimov's elder daughter, Gulnara. She has parted ways with her father and sought fame as a pop star using the stage name Googoosha. The lawsuit is pending, with the Uzbek government trying to exclude evidence in the case, according to the ICSID's website. Davronbek Akhmedov, a Tashkent-based official at the Uzbek Ministry of Justice, declined to comment, citing the pending lawsuit.

Karibzhanov says such incidents haven't deterred him from the most populous Stan. "Uzbekistan is interesting in the long term, and one must work with the country," he says. "One day, its mismanagement will stop, and it's the biggest market in the region."

In the meantime, he's anticipating a rebound in Russia, Central Asia's largest trading partner. After President Vladimir Putin annexed the Crimea section of Ukraine in March 2014, the U.S. and Europe responded with sanctions. Since then, Russia's ruble and oil prices have both tumbled by almost half. The International Monetary Fund projects gross domestic product will shrink by 3.4 percent this year, forcing the Stans to shore up their own economies. Kazakhstan, for one, has said it will increase government spending on infrastructure to as much as $24 billion through 2017 to help local companies.

The shaky state of Russia might be good for dealmaking in its former republics, says Agris Preimanis, the EBRD's lead economist for Central Asia. "Ironically, there is more interest from investors," he says. "They're coming to check out the opportunities in Central Asia as their business in Russia is very slow."

Money manager McCall says Asian investors are eyeing the Stans, while Europeans are more cautious. "The opportunity to make money in private equity continues to be there," he says, declining to comment on his deals with Visor.

Karibzhanov expects Russia's economy to revive. When it does, he says, he'll be ready to sell properties, including his Kyrgyz grocery chain called Narodniy, to Russian buyers. "If Russia returns to the level it should be, then Russian companies will become cash rich," he says. "The rebound of Russia's economy may take two to three years. It's not an issue of decades."

Whatever pain Central Asia inflicts, investors can't ignore the region, VTB Capital's Valiyev says. Natural resources and growing consumerism entice investors patient enough to pursue them, he says. "People who want to earn something will need to go into private equity and get deep into the details," he says.

Digging in deep is something Karibzhanov has been doing for years. "Every day," he says, taking in the expansive view from his balcony, "brings new opportunities." BM

BLOOMBERG TIPS

Private Equity Search

You can use the Private Equity Fund Search to identify funds that focus on investing in the former Soviet republics. Type **PEFS <Go>** on the Bloomberg Professional service. Click on the folder icon to the right of Region Focus. In the Region Selector window, click on the plus sign to the left of Asia Pacific (Emerging) to expand the list. Click on Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan to select the five countries. Click on the Update button. As of July 13, the search identified 17 vehicles centered on the region. The largest is the $500 million Falah Growth Fund. For a description of the fund, click on its name in the list and then on DES in the Related Functions window.

JON ASMUNDSSON


Evaluate deal risk
with the
Interactive Deal Tool
Available on multiborrower
U.S. CMBS presales

STRATEGIES

PROFILE

Profiting From Investor 'Mistakes'

Acadian Asset Management's Emerging Markets strategy beat its benchmark by 2 percent a year for two decades by taking advantage of market inefficiencies.

BY JON ASMUNDSSON

THREE TIMES A day, Acadian Asset Management calculates the relative attractiveness and expected return of 40,000 stocks around the world. "You may notice we like numbers," Churchill Franklin says with a laugh. The Acadian CEO is sitting in a conference room at the Boston headquarters of the quantitative investment firm for an interview in early May.

Across the table, Chief Investment Officer John Chisholm says that in essence what Acadian does is look for inefficiencies in the pricing of securities. "Investors make certain systematic behavioral errors in the way they make investment decisions," he says.

Take value. Companies that are cheap in terms of price to earnings tend to generate higher returns over time than expensive companies. One reason: Investors tend to extrapolate from a stretch of strong earnings growth and bid up a company's price, even when continued growth to support such valuations is improbable. Errors such as that can be tied to certain characteristics of stocks. "Factors is the quant term for them," Chisholm says. "We measure empirically what's the payoff associated with that error."

Acadian then uses its models to predict, given the current market and macroeconomic environment, what the return associated with that characteristic will be in the near future. "Then we build portfolios that maximize the exposure to those particular factors or inefficiencies in the marketplace," he says.

ACADIAN'S APPROACH HAS worked: Its $8.5 billion Global All-Country Equity strategy, for example, returned 1 percentage point more than its benchmark net of fees from inception in 2003 to June 30, 2015. Acadian, which was founded in 1986, manages about $75 billion for institutions in more than 40 strategies. The firm's $19 billion Emerging Markets Equity strategy, its largest, returned an average of 7.1 percent a year net of fees from Jan. 1, 1994, through June 30, 2015. By comparison, the fund's benchmark, which since 2001 has been the MSCI Emerging Markets Index (Net), gained an average of 5.1 percent annually over the period.

To explain Acadian's approach,

CHURCHILL FRANKLIN, JOHN CHISHOLM

CEO, CIO, ACADIAN ASSET MANAGEMENT

- Compare the attractiveness of **40,000 stocks**.
- Calculate the **expected return** for each one.
- Use an **optimizer** to build portfolios.

Franklin, left, and **Chisholm** in Acadian's Boston headquarters

PHOTOGRAPH BY **TONY LUONG**

Chisholm logs in on a keyboard connected to a large monitor on the wall. "We have a tool, think of it as a website, that the research and portfolio management team uses to understand what all the models are saying," he says. Acadian has about 300 employees working in offices in London, Singapore, Sydney, and Tokyo, as well as Boston. The firm is part of New York–listed OM Asset Management, which is majority owned by London-based Old Mutual. "Let me just pull up a stock example," Chisholm says.

'SO, CURRENTLY, MICROSOFT'S REALLY MEDIOCRE,' CHISHOLM SAYS, SCANNING A TABLE OF NUMBERS.

Microsoft is suggested. Chisholm types away at the keyboard. The screen then displays what looks like an elaborate spreadsheet. "So, currently, Microsoft's really mediocre," he says, scanning a table of numbers on the screen. He points to some valuation numbers, which are shown in blue. "It doesn't look horrible on a valuation perspective," Chisholm says, pointing to a set of raw data on the right side of the screen. "These are the traditional valuation metrics in this top group here," he says. Among the six pieces of data displayed are Microsoft's current price-to-book ratio and price-to-trailing-12-month-earnings ratio, which on this day is 19.5 times.

Those six measures are related, Chisholm says: If a company is cheap in terms of one metric, it will typically be cheap for the others. "So we combined them into what we call an aggregate factor," he says. Acadian labels that factor *price to intrinsic value*, and it's shown as a raw value, score, weight, and contribution in blue in a table on the left side of the screen.

The raw value is essentially an average of the six metrics. The score compares the raw value with those of the company's peers. "A score of zero would mean that the company is neutral on that measure relative to its peer group," he says. A score of 1 would mean that a company is 1 standard deviation more attractive than its peers. Microsoft's score is 0.16.

Acadian's secret sauce is how it weights the factors for a given company, Chisholm says. "So we have a stock factor attribution system," he says. He opens another spreadsheet that tracks the entire universe of stocks and points to a column.

THE FIRM RANKED all of the 40,000 companies by the value characteristic relative to their peers at the end of March, Chisholm says. "We run a regression of that end-of-March ranking against April's index-relative return for each of those companies," he says. "That regression coefficient there is 51.2."

TIP BOX

Type **EQS <Go>** for the Equity Screening function.

That means that globally on average a company that was 1 standard deviation cheaper than its peers in March would have outperformed them in April by 0.512 percentage point. "That tells us what's the payoff to that characteristic in this peer group," he says. Acadian takes the historical factor-return values and feeds them into yet another model. "It's kind of the forward-looking piece: How do we expect these different characteristics to do in the future?" he says. For each company, the firm sums the forecast payoffs from all of the factors to get a single expected return.

Acadian then inputs the data for the companies in a given strategy into an optimizer that trades off their attractiveness against transaction costs and risk. "That's ultimately how we determine what to buy and sell in portfolios we manage," he says. "There's a lot of engineering that underlies the process."

Jon Asmundsson is Strategies editor of *Bloomberg Markets*.
jasmundsson@bloomberg.net

OPTIMIZING A PORTFOLIO

You can use the Portfolio & Risk Analytics (PORT) function to optimize your portfolio. Type **PORT <Go>** on the Bloomberg Professional service, select an equity portfolio, and press <Go>. Click on the Trade Simulation button on the red tool bar and select Launch Optimizer. For a ready-made optimization, click on the Tasks button and select Load Task.... Click on Equity Tasks under Category and then on Improve Fundamentals: Maximize Earnings Yld & Free CF Yld. Click on Select and then on Run. JON ASMUNDSSON

Commodities

<Comdty> <Go>
displays the main menu for commodities functions.

FIRST <Go>
lets you access Bloomberg First Word stories on the oil market.

BRIEF <Go>
lets you subscribe to the *Oil Buyer's Guide* and *Pipes & Wires* Bloomberg Brief newsletters.

AGRI <Go>
displays a calendar of agricultural data releases.

ECO 10 <Go>
displays a calendar of energy data releases.

WHIS <Go>
enables you to view crowd-sourced whisper numbers for key energy data releases.

BCOM <Go>
lets you access data on the Bloomberg Commodity Index.

CRR <Go>
ranks commodity and index returns.

BGAS <Go>
tracks natural gas spot prices.

CPFC <Go>
lets you compare analysts' commodity price forecasts.

CFVL <Go>
displays real-time fair values for commodity forward curves.

BI LNGG <Go>
displays Bloomberg Intelligence research related to liquefied natural gas.

CTM <Go>
lets you find traded commodity futures.

FDM <Go>
lets you find data related to commodities.

MTL <Go>
monitors precious metals prices.

1) Crude 2) OSPs 3) Products 4) Swap Benchmarks 5) Retail 99) Feedback Whole

11) Americas 12) Europe 13) NAF 14) WAF 15) Asia Pacific 16) Saudi Arabia 17) Iran 18) Other Mid

	Time	Price	Chg	Diff	Chg		Time	Price	Chg
United States						Canada			
Alaska North Slope	15:55	63.35	+.68	2.90	+.15	Edmonton Syncrude ...	15:55	63.70	+.53
Bakken UHC	15:55	58.00	+.53	-2.45	+.00	Edmonton Mixed Sweet	15:55	60.25	+.53
Bakken Guernsey	15:55	60.70	+.53	.25	+.00	Edmonton C5 Conden...	15:55	56.95	+.53
Bloomberg USGC Sour I...	15:55	59.70	+.36	-.75	-.17	West Canada Select (...	15:55	52.65	+.53
Bonito Sour	15:55	59.70	+.53	-.75	+.00	Implied Bitumen	15:55	50.81	+.53
Cal Merc Avg (CMA) Diff	15:55	--	--	-.48	+.05	Mexico			
Eugene Island	15:55	59.45	+.78	-1.00	+.25	Mexican Mix	6/17	56.32	+.11
Heavy Louisiana Sweet ...	15:55	62.00	+.23	1.55	-.30	Isthmus			
Light Louisiana Sweet ...	15:55	63.75	+.38	3.30	-.15	to Europe	7/31	--	--
Mars Blend	15:55	59.85	+.18	-.60	-.35	to Asia	7/31	--	--
Poseidon	15:55	58.95	-.07	-1.50	-.60	to USA	7/31	--	--
Southern Green	15:55	60.30	+.98	-.15	+.45	to USA (Bloomberg)	15:55	64.28	+.77
Thunder Horse	15:55	61.05	+1.03	.60	+.50	Maya			
WTI Cushing	15:55	60.45	+.53	.00	+.00	to Europe	7/31	--	--
WTI Midland	15:55	60.75	+.98	.30	+.45	to Asia	7/31	--	--
WTI Posting Plus Diff	15:55	--	--	2.90	+.05	to USA	7/31	--	--

↑ **BOIL <Go>**
lets you monitor spot crude and refined-product prices around the world.

AHOY <Go>
tracks imports from U.S. Customs bills of lading.

BMAP <Go>
enables you to map commodities data and track ships and storms.

GLCO <Go>
tracks global commodity prices.

LME <Go>
displays the portal for the London Metal Exchange.

CCRV <Go>
charts the forward curve for a selected commodity futures contract.

CPLY <Go>
displays key data and correlations for commodity strategies.

NRGZ <Go>
displays snapshots of data from energy industry sources.

REFO <Go>
tracks refinery outages.

CMET <Go>
provides information about Bloomberg's electronic trading platform for commodities.

WETR <Go>
lets you analyze weather data.

Compiled by
JON ASMUNDSSON
jasmundsson@bloomberg.net


EVEN ONE GAP IN YOUR STRATEGY IS ONE TOO MANY.
MDY
You can tell pretty quickly if your sprinkler isn't cutting it. But what about your investment strategy?
State Street Global Advisors can help to make your strategy more watertight. Twenty years ago, we introduced the first exchange traded fund. Today there are over 140* SPDR ETFs to choose from. Covering every market segment from Mid Caps to Fixed Income, allowing you to precisely match your investments to your strategy.
If the holes in your portfolio need tending to, visit us at spdrs.com/highlights.
STATE STREET GLOBAL ADVISORS.
SPDR

Keeping Tabs on Deal Chatter

BY MARK BOARDMAN

SHARES OF STREAMING-video-technology company Envivio jumped as much as 17 percent on May 18 amid speculation on Twitter that the company would benefit from a content deal that Netflix and Jack Ma–backed Wasu Media Holding were discussing. You can use the News Search (NSE) function to identify actionable deal news such as the tweets about Netflix.

Type **NSE <Go>** on the Bloomberg Professional service. To narrow the search to companies in the Standard & Poor's 500 Index, click on the ticker list link. Click on Equity Index, then on SPX, and finally on the Update button. Next, tab in to the NARROW THIS SEARCH field, enter *IS IN TALKS WITH* and click on the Exact Match item in the list that appears. This search will find all of the stories about S&P 500 companies that include the phrase, which is commonly used in writing about potential deals.

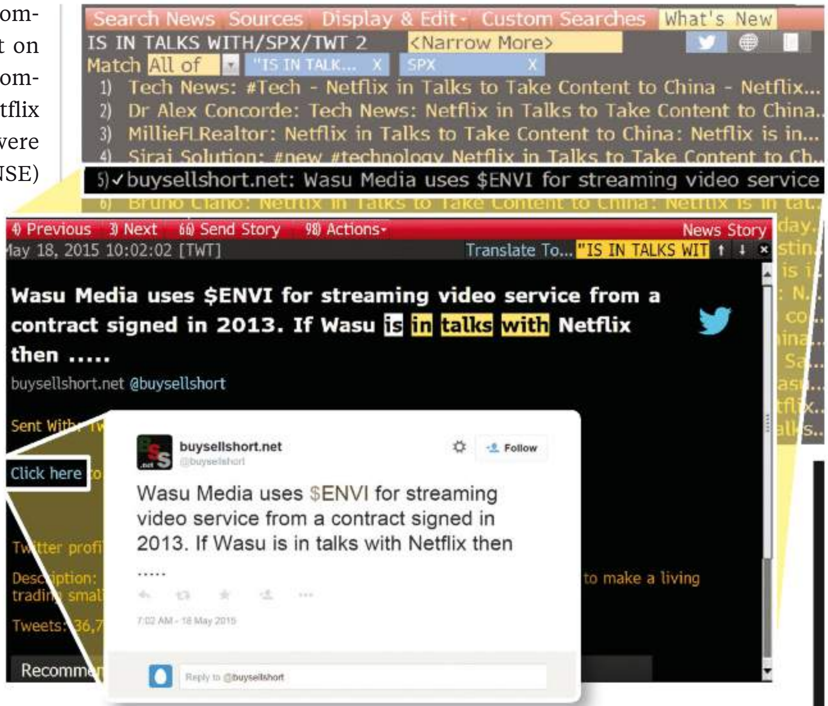
TO EXPAND THE search to look in all news sources, click on the Sources button on the red tool bar. Click on the circle to the left of Other and then on the circle to the left of All Sources. Then click on Done.

To set an alert that will notify you whenever a story matching the criteria appears, click on the Display & Edit button and select Save Search. Enter a name in the field and click on Save. Click on Display & Edit again and select Set Alert Delivery.... Select a delivery option and click on Done.

To narrow the search to include only tweets, click on Sources again. Click on the circle to the left of Select Your News Sources, enter *TWITTER* in the field that appears, and select the TWT item in the list of matches. Click on Done.

Back on May 18, the search flagged a tweet from @buysellshort: "Wasu Media uses $ENVI for streaming video service from a contract signed in 2013. If Wasu is in talks with Netflix then...." Shares of South San Francisco, California–based Envivio closed at $1.86 on May 18, up 3.9 percent.

Postings that day triggered a Bloomberg Social Velocity alert. To see it, type **BSV <Go>** for the Bloomberg Social Velocity Alerts function. Enter *ENVI* in the field and click on the ENVI US Equity match. Click on the May 18 item and you can see the preponderance of positive messages, represented by a green bar.



Type **NSE <Go>** to use the News Search function to build an alert for deal-related tweets.

Mark Boardman is an equity derivatives market specialist at Bloomberg in New York. mboardman1@bloomberg.net

TIP BOX

Type **TWTR <Go>** to build filters for the tweets you want to see.

Testing and Optimizing a Mean-Reversion Strategy

BY PAUL CIANA, CMT

"REVERSION TO THE mean is the iron law of financial markets," John C. "Jack" Bogle, founder of the $3 trillion–in-assets Vanguard Group, once said. Statistically, the farther prices move from their average, the higher the probability of moving back toward those levels.

So let's say you want to design your own mean-reversion strategy. Here are some tools you can use to build, back-test, and optimize such an approach.

First, one common way to track distance from the mean is with linear regression analysis. You can use the Moving Linear Regression (MLR) study to chart such an analysis for a selected security.

Type **GPO MLR <Go>** for a bar chart with the Moving Linear Regression study.

Type **TY1 <Comdty> GPO MLR <Go>** on the Bloomberg Professional service to chart the 10-year U.S. Treasury futures contract that trades on the Chicago Board of Trade, for example. The study works like this: Starting with the most recent data point, it looks back over a specified number of periods—by default, 14—and fits a line to that data using the least-squares method. (Least squares is a technique for determining the best fit of a line to a set of data.) The study draws a point on the fitted line for the current period. It then moves back one period and repeats the procedure, connecting those fitted points to create the so-called MLR line. Around that, the study plots standard error bands; by default, they're one standard deviation above and one below.

Type **BT <Go>** and click on New Strategy to create a mean-reversion strategy.

For a mean-reversion strategy, you could use the study to generate trading signals. For example, you could buy the futures when the price crosses below the lower error bar, which is called the MLR lower band.

THE THING IS, the study can look very different depending on which settings you specify. What parameters should you use to create the most profitable strategy?

To find out, you can use the Advanced Backtesting & Optimization (BT) function. To create your strategy, type

TIP BOX

Type **TECH <Go>** for the Technical Study Browser function.

The Optimization Analysis table shows strategy results using various parameters.

BT <Go> and click on the New Strategy button on the red tool bar. Enter a name in the STRATEGY TITLE field. In the Factors section of the screen, scroll down to Moving Linear Regression and click on it so that it appears to the right under Selected Factors. Next, to create a flexible stop-loss, scroll back up to the top of the Factors list and click on Add Variable.... Enter a name, such as *STOP,* in the NAME field. Enter *64*—which is the number of ticks equivalent to 1 point of contract value—in the VALUE field and click on Update.

THE RULES SECTION of the screen lets you set up your series of trading rules. To buy futures contracts when the price moves below the MLR lower band, select Enter Long under Action if it isn't already selected. Click on the arrow to the right of > under Condition and select Crosses Below. Click on the arrow to the right of Open and select Moving Linear Regression1. Click on the arrow to the right of MLR and select MLRLB to specify the lower band.

You can then add similar rules to specify when the strategy should exit long, enter short, exit short, or liquidate—a stop-loss when the strategy moves against you for 64 ticks, for example.

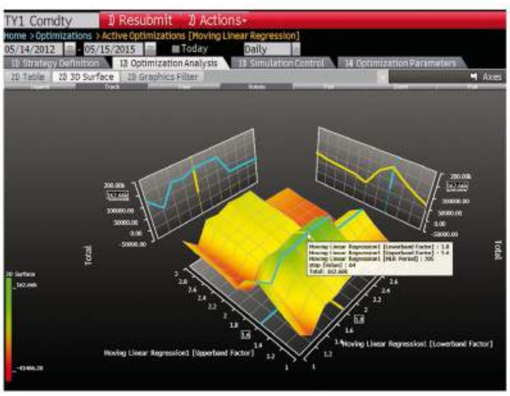
To see the results of your strategy, click on the Save button and then on Analyze. During the three years through July 1, the strategy gained 25.3 percent from 94 trades, with 51 wins and 42 losses. That's pretty good, but let's try an optimization to see if we can do better.

Click on the Launch button and select Parameter Optimization. The Optimization Parameters screen lets you set ranges of values you want to test for your strategy. Once you've entered them, click on Submit Optimization and then on View All Optimizations.

Click on a result in the optimization table for details of the backtest.

When your optimization is complete, click on it for the results. The table displayed under the Optimization Analysis tab is sorted by total profit and loss. Here, the best results came from using a 180-period regression with an upper standard error band of 1.6, a lower band of 1.8, and a stop of 62 ticks. For more details, click on the top result: These inputs would have maximized profitability, at a gain of 137 percent with a Sharpe ratio of 1.87.

Press <Menu> to return to the Table subtab. Click on the 3D Surface subtab to analyze results simultaneously and see the maximum profit point. The surface lets you evaluate how slight modifications to the inputs affect the total profit and loss.



Click on the 3D Surface subtab to analyze results.

Paul Ciana, CMT, is a technical analysis market specialist at Bloomberg in New York. pciana@bloomberg.net

Q: How can I track market expectations for policy rates?

A: To see how markets around the world are pricing in interest rate moves, you can use the new Market Implied Policy Rates (MIPR) function. Type **MIPR <Go>** on the Bloomberg Professional service. MIPR displays the monetary policy rate and the current effective floating rate for countries in the Americas, EMEA, and the Asia/Pacific region. The Basis column shows the difference between the effective rate and the policy rate, expressed in basis points. (A basis point is 0.01 percentage point.) The Meeting column displays the date of the next monetary policy meeting. The Implied Policy section of the screen shows the benchmark rate that's implied by trading at various maturities along the forward curve. To examine the change in the implied policy rate at a given maturity during the past 30 days, click on the arrow to the right of Analyze and select a tenor. Click on the spark line under Curve for a chart that lets you compare the current implied policy curve with the curve on a selected historical date. For a global overview of implied changes in rates, click on the World Map button on the red tool bar.

Country	Policy Rate	Policy Efctv	Policy Basis	Policy Meeting	Implied Policy 3M	6M	1Y	2Y	3Y	Curve	Total Change 1Y	1Y Over Low
1) Americas												
10) United States	0.13	0.13	1	07/29	0.18	0.29	0.60	1.25	1.79		48	0.58
11) Canada	0.75	0.76	1	07/15	0.50	0.46	0.62	0.91	1.31		-13	0.51
12) Mexico	3.00	3.30	30	07/30	3.18	3.51	4.41	5.26	6.00		141	3.86
13) Chile	3.00	2.97	-3	07/14	3.04	3.09	3.35	4.12	4.49		35	3.16
14) Colombia	4.50	4.37	-13	07/31	4.58	4.70	4.79	5.55	6.23		29	4.45
2) EMEA												
20) Eurozone	0.05	-0.12	-17	07/16	0.03	0.02	0.04	0.23	0.57		-1	-0.02
21) United Kingdom	0.50	0.45	-5	08/06	0.51	0.58	0.91	1.49	1.79		41	0.65
22) Switzerland	-0.75	-0.79	-4	09/17	-0.93	-0.90	-0.87	-0.48	-0.12		-12	-0.94
23) Norway	1.00	1.26	26	09/24	0.79	0.75	0.72	1.05	1.61		-28	0.70
24) Sweden	-0.35	-0.25	10	09/03	-0.43	-0.39	-0.29	0.20	0.81		6	-0.31
25) Denmark	0.00	0.05	5	--	-0.42	-0.34	-0.48	0.29	0.49		-48	-0.49
26) Czech Republic	0.05	0.31	26	08/06	0.00	-0.01	-0.01	0.22	0.46		-6	-0.30
27) Hungary	1.50	1.41	-9	07/21	1.41	1.43	1.61	2.28	2.79		11	1.59
28) Poland	1.50	1.72	22	09/02	1.50	1.50	1.54	2.00	2.22		4	1.53
3) Asia/Pacific												
30) Australia	2.00	2.00	0	08/04	1.83	1.78	1.82	2.16	2.54		-18	1.78
31) New Zealand	3.25	3.25	0	07/22	2.79	2.67	2.68	2.87	3.18		-57	2.62
32) Japan	0.08	0.08	0	07/15	0.06	0.07	0.06	0.11	0.23		-1	0.04
33) China	2.00	2.57	57	--	1.86	1.83	1.98	2.12	2.42		-2	1.64
34) India	7.25	7.25	0	08/04	7.20	7.28	6.90	7.01	7.04		-35	6.88
35) Korea	1.50	1.65	15	08/13	1.44	1.45	1.59	1.85	2.08		9	1.51

HELPFUL TOOLS FOR TRACKING INTEREST RATES

BI ECON <Go> displays Bloomberg Intelligence economics analysis.
XLTP XCBM <Go> monitors policy rates for 50 central banks.
XLTP XDOTS <Go> graphs the U.S. Federal Reserve's dot plot.
GC <Go> lets you chart curves in real time.

ENHANCED EQUITY COMPS

The Relative Value and Equity Relative Value functions have been enhanced with a number of new features. For many stocks, you can now use Bloomberg Intelligence–curated peer groups in your analysis. And for all companies, you can use Bloomberg's new BICS Best Fit algorithmically selected peers. The Best Fit algorithm ranks companies based on the similarity of their business segments. Type **EMC US <Equity> RV <Go>**, for example, to compare EMC, a Hopkinton, Massachusetts–based computer storage company, with similar companies. Click on the arrow to the right of Comp Source and select Bloomberg if it isn't already selected. A yellow line that says Use BI Peers will appear in the middle of the screen followed by the name of the Bloomberg Intelligence peer group.

ASSESSING A STOCK ON THE FLY

Graphic Dashboard is a new Launchpad component that lets you quickly evaluate real-time information on a selected stock. For a component that you can incorporate into your Launchpad view, type GRAPHIC DASHBOARD on the command line and click on the matching Launchpad item. For more info, type **DOCS #2073339 <Go>**.

Compiled by
JON ASMUNDSSON
jasmundsson@bloomberg.net

TIP BOX
For more recent enhancements, type **NEW <Go>**.

For information on the BLOOMBERG PROFESSIONAL service, contact the sales office in your region: New York 212-318-2000, San Francisco 415-912-2960, Frankfurt 49-69-920410, Hong Kong 852-2977-6000, London 44-20-7330-7500, São Paulo 5511-3048-4500, Singapore 65-6212-1000, Sydney 61-2-9777-8686, Tokyo 81-3-3201-8900.

September 2015, volume 24, number 8. BLOOMBERG MARKETS (ISSN 1531-5061, USPS 008-897) is published monthly with a combined July/August issue by Bloomberg Finance L.P., 731 Lexington Ave., New York, NY 10022, and distributed free to subscribers of the BLOOMBERG PROFESSIONAL service. POSTMASTER: Send address changes to Circulation, BLOOMBERG MARKETS, P.O. Box 1583, New York, NY 10150-1583. Periodicals postage paid in New York and at additional mailing offices.

MIX
Paper from responsible sources
FSC® C101537